BEYOND THE WEST

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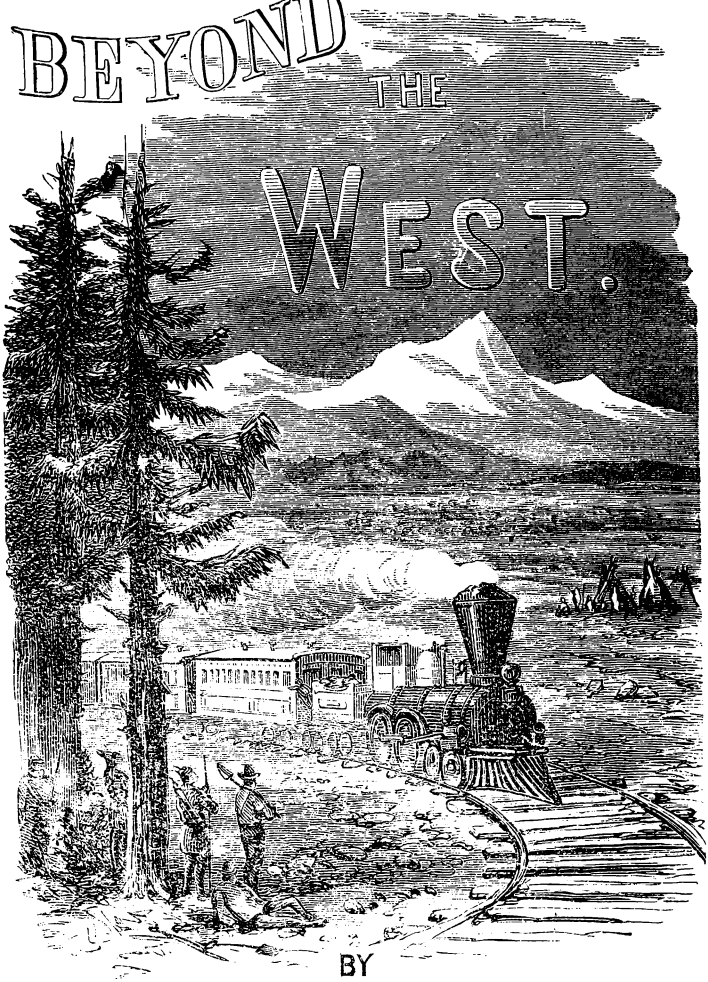

BY

GEORGE W PINE,

HERKIMER, N.Y.

BEYOND THE WEST;

CONTAINING

AN ACCOUNT OF TWO YEARS' TRAVEL IN THAT OTHER HALF OF OUR GREAT CONTINENT FAR BEYOND

THE OLD WEST,

ON THE PLAINS, IN THE ROCKY MOUNTAINS, AND PICTURESQUE PARKS OF COLORADO.

ALSO,

CHARACTERISTIC FEATURES OF NEW MEXICO, ARIZONA, WYOMING, MONTANA, IDAHO, EASTERN AND WESTERN OREGON, UTAH, NEVADA, AND THE SUNSET LAND,

CALIFORNIA THE END OF THE WEST.

ITS PRESENT CONDITION, PEOPLE, RESOURCES, SOIL, CLIMATE, MOUNTAIN RANGES, VALLEYS, DESERTS, MORMONS, GREAT SALT LAKE, AND OTHER INLAND WATERS, THE

GREAT CONTINENTAL RAILROAD,

TOGETHER WITH

THE REMARKABLE MINERAL DEPOSITS, AND MOST WONDERFUL NATURAL SCENERY IN THE WORLD, BOTH ENTERTAINING AND INSTRUCTIVE.

BY GEORGE W. PINE.

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PREFACE.

Twenty odd years ago, little was known of that somewhat mysterious part of our continent, lying far beyond our ideas of the Old West, except the far-off land of the Indian, the hunter and trapper, the furs and the home of the buffalo. One great blank book—mostly without a preface—with a few scratches, here and there only, on the title page. But how diligently and understandingly the type were made, set up and electrotyped, within a few years past. We see in the now unabridged edition, bound in a style more useful than ornamental, (not yet gilt edged,) but nicely sprinkled and held together with the great civilizer—iron rails. As all the families of men have an interest in the occupation and development of this, now our New West, everybody wants a volume of this—Nature's remarkable edition.

To supply a demand which now exists for cheap, comprehensive and reliable information, with regard to that other half of our great continent, lying beyond the Old West, this work has been prepared and is now placed before the reading community. In the spring of 1865, the author found himself on the west bank of the Missouri River, at Atchinson, seated in an

overland stage for the Pacific. Having made extensive travels in various parts of the country during the season, he took the steamer from San Francisco to Panama, and from Central America to New York. A year and a half of home life, in the picturesque and historic Valley of the Mohawk, had served only to increase a desire to revisit these vast and interesting regions; so full of geographical and historical information; so replete with scenes of wonder and beauty; sublime, yet ugly; magnificent, yet rough; beautiful, yet mean; which can be found in no other country—somewhat of the kind the Grecian poets gave a local habitation on the northern coast of Africa, as peculiarly the unknown land of mysteries.

"Here they placed the delightful gardens of Hespirides, whose trees bore apples of pure gold; there dwelt the terrible Gorgon, whose snaky tresses turned all things into stone; there the invincible Hercules wrestled and overthrew the mighty Antæus; there the weary Atlas supported the ponderous arch of Heaven on his stalwart shoulders."

This poetical effusion, unbridled as it is, has a counterpart in many places through this other part of our country. The many peculiarly interesting objects; its wonderful formations; its mysteries, scattered everywhere on the surface, and also imbedded in the granite hills, furnish abundant material to interest the curious, and to demand of the intelligent traveler,

and the most scientific, the profoundest knowledge, and remain a mystery still.

Also, Nature's great banking systems, in the deep recesses of the mountain ranges, where the precious metals are deposited quite past finding out by human intelligence. Indeed, very much of the country is yet Nature's wide-spread blank book, to be filled up by future generations. With all our facilities of travel and general information, it must be a long time before our people can have an adequate conception of these vast regions of our goodly heritage. No traveler's pen can properly describe many of the objects presented here. The reader can have at most but the best efforts of an honest purpose.

Again: In the early spring of 1867, we crossed the muddy Missouri at Omaha, and viewed with renewed pleasure the great, shining face of the setting sun, as it went down behind the Rocky Mountains.

The steamship of the desert was now ready to start on the world's highway—the change was an agreeable one, after my previous experience—but the road was finished only two hundred and fifty miles, at the end of which the old stage was ready to impress upon our mind and body more firmly the hard experience of time gone by. I had seen just enough of this other half of our remarkable continent, only to increase a desire to largely extend my travels and become more acquainted with the general characteristic features of the country.

The substance of the knowledge thus acquired during these travels, is now offered to the reader—in as condensed a form as the limits of this book permitted—hoping that you will be interested in its contents, and your knowledge of the country enlarged; if so, the object of the author will have been accomplished, and his years of travel and deprivation, away from civilization much of the time, will have been to no purpose, but amply rewarded. We have not designed to make a connected travel, to fill up valuable space with the multiplicity of little domestic matters, which are constantly occurring while journeying in the oriental way—as those have done who have written their travels over this country.

We have purposed to give substance, rather than lengthy descriptions; to abbreviate sufficiently to make a book that would come within the means of all who wish to read. Not, however, unconscious of inability to do justice to such an undertaking, I leave the work to secure the favor which earnest endeavor ever receives from a discriminating public.

AUTHOR.

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BEYOND THE WEST.

CHAPTER I.

INTRODUCTORY.

Kind reader, we introduce you to our new book, hoping you will be sufficiently interested to read it through and not fall out along the way, out of sleep and out of temper, before the journey is accomplished. Although some of its pages may seem uninteresting, yet the varied and important subjects presented to the traveler all over the great plains and mountain ranges of the western half of our now West is such as to command the careful investigation of all our people. Much of the country is so wonderfully made up, composed of such a variety of material, and the native tribes which inhabit it are still mysterious beyond the traveler's pen to properly put upon paper—such descriptions as will give the careful reader an adequate knowledge of this half of our continent, which is destined to be a peculiar and very important place in the now glorious future of this country. If by writing this book

the information of the reader has been enlarged—stimulated to more fully understand and appreciate this goodly heritage of ours, the primary object of the writer will have been accomplished, and his long mountain wanderings, away from civilization, will not have been to no purpose, but amply rewarded.

This may, with some propriety, be called the traveling era, and it is an interchange of those individual acquirements which make up and characterize, to some extent, this present age.

With the present increased facilities for travel, everybody, together with his wife and family, are acquiring traveled knowledge. Indeed, if all travelers do not write a *big book*, it is not for want of interesting material out of which to make it, or the lack of ability, (at least in their own estimation,) but on account of an over load of more pressing business—a want of time. Those who have time and money may visit whatever country and places they may wish to see, but they are very few when compared with the whole. Most people have their traveled information brought to them in their own homes; while performing their various vocations, for a small consideration they have at command the traveler's accumulated knowledge which perhaps he has spent years of hardship, deprivation and peril to acquire. While it is desirable that all our people should in-

form themselves, make a familiar acquaintance with the Old World, yet how much more important that all should become, somewhat at least, familiar with their own native Republican land first.

There are very many who travel for years in foreign climes who have never seen any part of the great western half of the American continent. All such of our readers are cordially invited to take our humble conveyance and go with us by rail, by wagon occasionally, by pack horse and mule, and many times by packing ourselves; as some portions of the road is inaccessible to any four-footed animal, it can be attained only by the persevering traveler on *foot*. Many of the most remarkable places would be missed if not made in this way, where the natural elements long centuries ago have done their wonderful work —beautiful, yet rough; magnificent, yet ugly; and as a writer said of Moscow, "Magnificent, yet mean."

CHAPTER II.

THE DISCOVERY OF THE AMERICAN CONTINENT.

Kind reader, as our outfit (always familiar on the borders of civilization, beyond which the traveler must carry everything he needs on the journey) as yet is so incomplete, and being far away from an outfitting centre, we are quite unprepared to start on the long travel before us, consequently you are invited first to go with me through an address on the Discovery of the American Continent; after which, should we be in good humor with each other and ourself, we will give our friends and relatives a long farewell for the next year and a half and begin our travel beyond the old West and where the new begins, and journey towards the setting sun to where that great luminary seems to retire for the night—far out in the Pacific Ocean. Our theme includes a most prominent period in human affairs—is full and rich with interesting useful thought. The discovery of America and the circumstances with which it is surrounded may be considered one of the most extraordinary events in the annals of the world.

As memory binds together time's different peri-

ods, we stop to linger around this most wonderful of histories. Strange, indeed, that this great continent should have lain undiscovered for so many centuries, but the mass of mankind had made but little improvement over the darkness of the middle ages. The navigators of those times felt themselves safe only as they crept along the frequented coast. But to turn their little insecure vessels boldly to the West—to embark upon an unknown ocean, not believed to have an outer shore, to pass that bourne from which no traveler had ever returned, and from which experience had not taught that any mariner could return—was beyond their feeble comprehensions; but the fullness of time had come. The Empires of the first and oldest portions of the human family must flourish and fall before the great seals of creation are broken. They must show what they could do for the amelioration of the human race, before Providence unlocks the great mystery of His mysterious creation.

A noble man, who can go out boldly and with confidence, on untrodden, unknown regions, either on sea or land, is like the great luminary when compared to a small planet.

The magnanimous Ruler of the Universe seems to bind up great events in the lives of some men. Those individuals who stratify the space of time

between the beginning and end of mortal life the fullest, with the very best material for working days, and furnishes the parlor in his bosom with that kind of furniture which has not gone out of fashion for the last eighteen hundred years—not like some in those more favored times, who send their cards to church whilst they remain at home—are the property of time, and their names, of right, ought to be engraven on the record of every age and in every clime—living members of the world's best order of nobility.

He is a strong man, with a vigorous brain, that can pull out as a telescope its intellectual powers and lift the uncertain thick, dark vail which hides distance and see the end. He is truly a great man who can look through the age in which he lives, make excursions into the unknown future and hunt up the distant hiding places of creation.

Providence seems to have held this great heritage of America for a new home, upon which to establish more securely than had been done in the Old World the ennobling and underlying principles of a higher civilization, where the different races of mankind could have a home, and worship him according to the dictates of an enlightened judgment, freed from eastern human restraints. Send off the mind, that great mystery of our being, over the solid, much

trodden Appion way, into the regions of the past and bring a sympathizing spirit back to view to go with us to discover our then unknown land.

Discovery is the peculiar subject of our hero—the chosen theater of his intellectual dominion. A great soul has arrived on earth, fashioned after a model none but an Almighty hand could make, whose life is to change the old channel of the human race. Nature mysteriously brings upon the theater of the world at times mysterious men to accomplish some of her great purposes. Sometimes a great soul seems to come forth like an exhalation from the interior of the earth. Columbus educated himself for his business, this made him strong and decided in his opinions. Formidable difficulties beset him from the first, such as no other man could have overcome at that time. His far-reaching purpose looked through the twilight of his day and imparted to his acts a perseverance that no obstacles could impede, a true man whom no prosperity could intoxicate, no disappointment discourage—having a large supply of the indispensable article called energy divine ; a boldness of determination that never hesitated when the judgment was decided ; a deep love for Christianity ; an incorruptible integrity ; a love for faithful duty that never grew cold. Columbus had impressed on his mind the real image of a new

country in the West. No old nurse or son of Esculapius was skillful enough to keep the image asleep in such a lodging place. This gave purpose to life, his mind had long flowed and made a deep channel in this direction. The marvelous tenacity with which he clung to the object he had set in his heart is without a parallel, and will go down through the long tracks of time. No obstacles can stop a lofty purpose, or outward darkness quench the light of a great, a noble soul, undismayed by difficulties, unchanged by change of fortune. Although everything grew dark and discouraging around him, he showed the same unaltered purpose. His penetrating vision reigned through the whole horizon of possibilities to seek a gleam of hope beyond the dark clouds about him, to illumine his desires. Though everything grew dark and darker around him, he showed the same unaltered purpose. He had established in his own mind some of the now settled principles of astronomy that the earth is a globe, capable of being circumnavigated. This fruitful truth revealed itself to the intelligence of Columbus as a practical fact—an original idea with him—for it had not, at that time, been incorporated into the general intelligence of the age in which he lived—an illustrious example of the connection of scientific theory with great practical results. He

inferred the existence of a continent in the Western Hemisphere, by considering the necessity of a counterbalance to the land in the Eastern.

His reflection and knowledge enabled him to discover the constructive principle, that the All-Wise Maker of this, our globe, had properly balanced it. You see the necessity—a wise omnipotent arrangement by the great master-mind—that there must be an equilibrium for the purpose of revolving.

We have here intellect scientifically trained into system; not the dreams of a brain put into action by ever-shifting, half-formed thought. The impressed image knocked constantly at the door of enlightened reason to be let loose and discover the New World. After the great discoverer matured his plan he never spoke in doubt, but with as much certainty as if his eyes had beheld his darling object. Like a firm rock that in mid-ocean braves the war of whirlwinds and the dash of waves, he read, as he supposed, his contemplated discovery, as foretold in holy writ: that the ends of the earth were to be linked together, and that the magnificent work of Providence, through the mystic tissue of the universe, would in time interweave all the human family with the thread of universal Christianity, and wrap up the nations in its broad folds. Consequently we find him supplicating, in tones of humiliation, the

different thrones of Europe ; traveling on foot, having all his worldly goods with him ; despised by the pretended philosophers, laughed at by the ignorant, and trifled with by the arrogance of ministers and their dependents. But he was independent, at the same time dependent ; never compromised himself or his principles a right with a wrong. Perhaps he lived at that distant period in sight of independence, —as near the Fourth of July as many in these more favored times.

Ultimately he obtained an interview with the Court of Spain, who favored his plans enough to call together the most of the scientific professors, that he might have an opportunity to lay his plans before them. At this time Spain was at the summit of her greatness, and had her greatest men. When explaining his plans of discovery to the philosophers, and that the earth is a revolving globe, which might be traveled round from east to west, "Why!" said they, "what a mystical theory, contradicted by every step we take upon the broad, flat earth which we daily tread beneath our feet." To them it was visionary, a vast nothingness. They came together with doubt in both hands—could not travel out of their old stratified beliefs.

To assert that there were inhabitable lands on the other side of the globe, would be to maintain that

there were people not descended from Adam, as it was impossible for them to have passed the intervening ocean.

Some of his learned hearers were convinced by his powerful reasoning, and all were warmed by his eloquence, but opposed his plan and object, and his long cherished enterprise swung far back into the cold regions of unbelief and unpopularity. The great truth rejected, lay discouraged at their feet, believing, as they did, that the old rusty lantern of the past in their hands threw light on all the distant corners of creation. Nevertheless, the great fact had a living home in the capacious mind of Columbus—the home growth of his own intellect—clothed with warm and living thought. He picked up and put together his oft broken hopes, and gathered up again his energies for another effort.

"Where ignorance is bliss 'tis folly to be wise." Consequently we find him supplicating the different thrones of Europe, at a time when kings considered themselves the wisest of mortals upon earth. Eighteen years of weary negotiation had failed to procure for Columbus the sanction and aid of a government, —eighteen years of despairing solicitations and weary with long journeyings. Amid all his trying circumstances he never consented to compromise his superior manliness, or accept of any terms not

strictly honorable to himself, and worthy of his magnanimous purpose. His wonderful perseverance under such opposing circumstances during those long and gloomy years, will descend in the undying archives of time. Finally, the penetrating vision and magnanimity of Queen Isabella resolved to favor the undertaking, and requested that Columbus might be sent to her. Yet she hesitated, knowing that her husband, who would be "Lord and Master," opposed the enterprise, and that the royal treasury was nearly drained by long and expensive war. But with true woman's earnestness of purpose and grandeur of soul, she said: "I undertake the enterprise for my own *crown*, regardless of an opposing husband or anything else, and will pledge my jewels to raise the necessary funds."

He who will oppose "Woman's Rights" (when right) hath no soil in his heart for the growth of just and liberal principles. Let us take through tickets—not to cross the Continent—but the great unknown ocean spread out by God around the globe, not to separate, but to unite the Human Family, being the only means of intercourse between regions so distant. We go beyond the then known limits of the world to discover and make known to the Old World the New. Leaving behind our agreeable homes, with all their happy surroundings, our ex-

panded and expansive country, homes of healthful millions—the growth of Columbus' genius—we see the master spirit foreshadowing the mighty enterprise, carefully and systematically arranging his business, preparing his little fleet to "quit the still shore for the troubled wave," and brave the perils of unknown seas. All arrangements completed, three small caravels, or fishing boats, a hundred and twenty men, we behold the great leader, the gray-haired sire, with eye intent, and on the visioned future bent, go forth on his towering ambition, the compass his only pilot, the constellated heavens his only chart, to realize that magnificent conception in which his creative mind had planted the germs of a New World; passing rapidly from the then crowded hive of the Old World, like a meteor, to the wonder-stricken gaze of man, now broken away from the limits of the Old World and launched into the untrodden regions of the mysterious ocean and the unknown future—the polar star his watch tower, and the crystal eyes of heaven to guide him. He traveled away from the then dull mass of mankind on the strong vehicle of a well-balanced, penetrating intellect towards that undiscovered country (as all supposed) from which no traveler returns. Leaving family, friends, country, all the home-rooted ties that hover in the human heart, behind—every thing be-

fore him chaos, mystery and peril—onward and onward he measured off the long and weary road over the bosom of the heretofore trackless waters, with that perseverance that knew nothing short of the accomplishment of his grand object, with a crew long before discouraged, and threatening to send him Jonah-ward if he would not return.

Others could see no morning beyond the night that enveloped them, while he rose higher as others sank in despair, moving serener the greater the agitation became around him, exhibiting a reserved power equal to any emergency. The vivid remembrance of his sacred promise, of long years of exposure and hardship, began to travel through his brain like sharp lightning through the heavens. Many a daylight dawned and darkened; others stood far down in the cold waters of unbelief; all seemed wrecked on the chilly banks of trouble, while he turned his aching eyes to the West to catch a parting kiss of the setting sun. The dark clouds, as of a long arctic night, seemed to settle down upon his long cherished enterprise. All his fond anticipations now seemed soon to be wrecked on the chilly banks of utter disappointment. Everything was inside the circle of a few hours, (for he had agreed to return if land was not discovered within a given time.) His before warm hopes ran cold and

gathered at his heart. The streams of life within him gave signs of woe—that all was lost. Loudly blew contending tempests on his devoted head; great troubles at hand and none to help. All seemed lost and far away from their native land. "Return," return," went over the then wilderness of waters. Columbus' lengthened shadow over the boundless waters moved beneath the silvery-curtained clouds, lost and left in loneliness, deep waters and difficulties thick all around, each moment big with trouble. He rode on contention and directed the storm when hope had turned to despair in every heart but his.

But his great undertaking shall be finally accomplished because written on mid-face of heaven, where all the world might see it. There are occasions in which a great soul lives years of wrapt enjoyment in a moment. His great soul then caught the treasure it through life had sought. His darling object was fixed in the capacious recesses of his mind. That eye, that life which had long lived in the unknown West to the Old World, saw a far off moving light. As the hands on the immutable clock in the ethereal dome marked the long hours of that never-to-be-forgotten night, when the Old World first saw the New, moved slowly on time's face to him.

First of all we behold the great discoverer of Amer-

ica standing on his storm-shattered bark, the shades of night having fallen on the sea—yet no man sleeping. The dashing billows of alternate hope and despair rolled through and convulsed his own troubled bosom. Extending forward his weather-beaten form, straining westward his anxious eyes until Heaven at last granted him a moment of rapturous delight, and seemed again to fill the world with new delight—with joy and gladness in blessing his vision with the sight of the before unknown world. The great elemental mystery of a New World was settled. Land swelling up from the great ocean, clothed in the habiliments of nature's richest beauty; glorious morning sunshine playing in the green tops of trees; spring abroad among the branches; homes for happy life sitting in the distant valleys of perpetual green; a beautiful island, as if direct from nature's great mirror and dressing room, magnificent and beautiful, full of tropical fruit, like a continental orchard.

Upon landing Columbus threw himself upon his knees, kissed our common mother earth, returned thanks to God, followed by all his companions, ardent in their expressions of repentance and admiration. Then and there the first Christian bent the knee to thank the Sovereign Ruler and Maker of the universe for the extension of the earth. He then

struck a chord that vibrated anew around the innermost heart of the Old World, and pulsated for the first time around the earth—held up the mirror which shows every soul its own face.

That morning, like the morning of creation, stood forth an additional world as to mankind, in the presence of her family, the twin sister of the Eastern Continent, as sisters of one house are alike, looking up through her tears, raising her head high above the surrounding mighty waters. Thus addressed Columbus: "I have sought you—have been looking far away over the broad ocean since the great I Am said, 'Let the waters be gathered together into one place, and let dry land appear.'" Then I came up from the innermost caverns of the deep waters, and in my unimproved home I welcome you, notwithstanding the deep breathing of subterranean life and the natural elements have changed my once smooth, unwrinkled cheek of girlhood, and left deep and wide century furrows on my face. Yet I welcome you, for by your instrumentality my old constitution will be made to smile with youth and beauty. I will watch over and be kind to you and yours, will exercise parental care, and we part not. "Whom God joins together shall never be severed," through all the crooked ways and dark paths the human family have to tread. With a warm, pul-

sating heart I will give the exuberant bosom of a common mother to all the families of men who will come unto me. With arms extended, and with welcome hands, I will take my legitimate children and nourish them upon my capacious bosom, for they will appreciate my blessings, and draw from me that best of life that maketh children men, intelligent and free, grow great, prosperous and happy in my approving smiles. I will add to the jeweled diadem of the Old World a central star, around which in time all the old crowned continents will revolve and bathe in my radiating light, and happy life will look where I live for higher types of life, from the Arctic circle to the tropics, from the rising of the sun to the gowing down of the same. The old rheumatic, life-destroying systems of extending empire and propagating religion by fire and sword through rivers of human blood, trampling the fairest field in every century into bloody mire by mighty armies, here found an antidote, a heart felt counteracting influence, in our more congenial soil for working life.

The gray-haired customs of the people in the old countries—shut up like an oyster in itself—crawled out of its century-worn shell into a better life. This the strongest wedge that ever split the knotty block of blind intolerance. This the heavy weight which

pulled old empires down. Inquisition can never more seal thy lips—a new civilization; more enlightenment; upward and onward around the universe. The art of printing being discovered about this time, the storehouses of antiquity were opened to the world—the accumulated minds of the past had a "Rip Van Winckle" resurrection and came forth from dusty alcoves, and again spoke to living, acting men.

The old, grown together, matted web of ages, woven far back in the dark chambers of the past, began to untwist—and the great Reformation about that time aroused a new, upward and onward movement in all human affairs. From that time there arose a more liberal knowledge—a before unknown light penetrated the twisted meshes of human imperfections, and began to cast off the scale of crushed habit and to develop a better growth of the nobler, the higher part of intelligent existence. The old empires of men were soon to plant in this new land the elements of the highest civilization the world had yet known. The human heart began to vibrate anew; the sharp edge of independent thought and action struck quick and deep, to plant the germs for a more enlightened empire in our rich and beautiful, but unsubdued land. You have, no doubt, heard of Young America. He is fashionably built, high-fed,

high-hearted, but gets the dyspepsia in his neck-tie and the reputation of being headstrong, because he carries his head on his shoulders instead of under his arm, and feels the pulse-beatings of the world's mighty heart.

The dictates of silent nature would rebuke us were I to leave the great discoverer here—would call us ungrateful. We pass that period of his life which shows how soon a change may come over life's resplendent day, caused by the inhumanity of a usurping commissioner. When the noble-minded Isabella heard how he had been inhumanly treated and the royal authority abused, her large heart filled with mingled sympathy and indignation, for he had been sent from the land he discovered to the Court of Spain in irons. When he saw sympathizing tears in the eyes of his open-handed, warm-hearted Queen, he fell at her feet. There is a gilded cord of sympathy running through, and throwing its folds about the citadel of life in every bosom that vibrates with music to faithful duty and repeated kindness—knitting, as with golden fingers, a silken web around troubles.

Columbus made other discoveries and explorations which were perilous and lengthy; so that when he ultimately arrived in Spain, his patroness having finished her earthly work, his income not

having been paid, he had no home but an inn; and poor, with health impaired by his long and weary care, he soon found his earthly end approaching. He put in order all his worldly affairs, and made arrangements to have the Holy Sepulchre rescued from the infidels. He left none of life's duty unperformed. He made Christianity a centre around which all things took their place. With a few devoted friends about him, his great soul traveled to another clime —went to the Eternal Father's home to rest, full of honors and full of years, leaving this our country as his enduring monument. He had done enough of this world's hard work, contended manfully with the vicissitudes of human life. He acquired his honors contending, not on battle's crimsoned field, but against poverty, hardship and remarkable circumstances amid the opposition of his fellow men. His life furnishes an illustrious example for men who will come out from the self-same bog-trot all the year round, and assume the execution of high undertakings and the fulfillment of a noble purpose. He never stood on the narrow ridge of self, but graded it down to a proper level. He never sought wealth, but developed himself to the service of mankind.

"Then I pray thee write him as one who loved his fellow men." A wrong trembled like a guilty thing, surprised in his presence, for he stood on the

heights of honor, and virtuous acts always felt his fostering hand. He seemed to have been designed to fill up a great vacancy in the round of usefulness high Heaven bestows. A great man, indeed, who has the eternal principles of true manliness in his very being, who can say I *am a man* in all the noble thoughts which that word conveys—nothing that is human is foreign to me. I represent philanthrophy and morality not in a stolen coat.

Genius and unflinching resolves, when concentrated upon one object, seldom fail to accomplish magnificent results. You see the grateful nation for whom he had labored bearing his remains to the land he first discovered, and on the transfer of that island to the French in 1795 we again see them bearing his remains to Cuba and depositing them in the great Cathedral at Havana, in the wall on the right side of the grand altar, with all the national display due to departed greatness, amid the city's roaring cannon and surge of men. You will remember that he was sent home degraded, in ignominious chains, from this very port from which his remains were taken. But posterity, ever just to true greatness, thus verifies the great principle that a life filled with commendable merit never fails to be rewarded by the commendation and applause of posterity; or as the acorn drops to earth unseen, let

Time's unearthing hand cast off its shell, when the real life within comes forth and we behold the trunk, the branches, the foliage, the solid oak. True merit—real greatness—outlives calumny and receives its glorious rewards in the admiration of after ages. Considering the time in which he lived, he was like our own greatest of men—who was "first in war, first in peace, and first in the hearts of his countrymen,"—the embodiment of honor, the repository of justice. They drank largely of the stream of life that ever flows through the Eternal City, bearing in their bosoms the crown jewels of immortality. But few lives are bound closer together with sealed gold. The one gave to the world the American Continent, a new home for the nations; the other planted deep in our land Republican Government, the germs of true happiness, and unfurled truly "Freedom's banner,' wrapped us up in its silken folds, and left the trophies of enduring fame down in the deep recesses of our national heart. Their deeds of lofty purpose will hang on the ends of time, covered with wreathes of immortal honor. As certain products of the earth are the natural growth of peculiar soils at particular times, so some men emanate almost necessarily out of certain conditions of civilization, from the culminating point of producing causes, and stand forth as the representatives of the times in which they live.

We admire and praise that individual who answers best the great end for which he was created. We admire that tree, that vine which bears fruit the most rich and abundant. That star which is most useful in the heavens is the one we admire the most. We have in the character of our subject a representative man—fully developed and meritorious, but long since enrolled among the noblest of the dead. Rest in peace, great Columbus, thy fame circles the temple of memory high up. Thy name will ever be mentioned with honor; it is like that of a household idol in the nation's citadel of life, and will be handed down with reverence, will live as long as there is an American race living in waving fields, with groves of happiness between. Far be it from my purpose to adorn our subject with a chaplet plucked from the domain of others, when we say his far-reaching intelligence, his noble character, is a full pattern for any age and country. He wears not borrowed honors; he will ever receive the grateful respect of a grateful people.

Go back to the old empires, examine the honored names, the benefactors of earlier days; turn over the records of Ancient Greece; review the books of mighty Rome; summon back the honored dead of every age; and where, among the race of mortal men, shall one be found who has been a greater ben-

efactor to mankind than Columbus. His tomb, of right, belongs to this country, and we believe the time will come when his remains will be a sacred deposit in our land without their being removed. That the American Eagle will spread her life-giving wings of better life over that queen gem of all the islands, her feet resting upon a noble monument, a tribute honorable to parent and child, designed by the grateful hearts, upraised by the willing hands of American citizens a monument to a world's benefactor—the great, the immortal Columbus.

"Abou Ben Adhem (may his tribe increase)
Awoke one night from a deep dream of peace
And saw within the moonlight in his room,
Making it rich and like a lily in bloom,
An angel writing in a book of gold.
Exceeding peace had made Ben Adhem bold,
And to the presence in the room he said,
'What writest thou!' The vision raised its head
And with a look made of all sweet accord,
Answer'd 'The names of those who love the Lord.
And is mine there?' said Abou. 'Nay, not so,'
Replied the angel. Abou spoke more low
But cheerily still, and said, 'I pray thee, then
Write me as one who loves his fellow-men.'
The angel wrote and vanished. The next night
It came again with a great wakening light,
And show'd the names whom love of God had bless'd
And lo! Ben Adhem's name led all the rest."

CHAPTER III.

ITS FIRST SETTLEMENT.

The discovery itself of the American Continent may properly be regarded as the most extraordinary event in history. In this, however, as in other events, familiarity blunts our conceptions and time dulls the sharp edge of our perceptions. Yet the more I have meditated, the more I have investigated, and become familiar with the wonderful circumstances with which it is clothed; its magnitude increases with every successive contemplation. That a continent as large as Europe and Africa united, extending on both sides of the equator, lying between the Western shores of Europe and Africa and the Eastern shore of Asia, with numerous intervening islands, stopping places on the road of discovery, should have been undiscovered for five thousand years is a mystery beyond human comprehension. It would seem that the All-Wise Ruler of the human family must first see what the nations of the Old World could do, towards establishing His great humanity upon earth, before the dark curtain which hid its last hope is lifted up. The old intolerent civilization, when wheighed in the eternal balances of high Heaven, was found wanting. On the

first day of August 1620, a few care-worn English subjects exiled themselves from Delf Haven, in Holland, to encounter the then dreaded perils of the Atlantic and the still greater uncertainties of their proposed settlement on the edge of the New World.

In coming to this country, our fathers contemplated a safe retreat across the sea where they could worship God according to the dictates of their own conscience. Judging from the primitive compact signed on the 11th of November, 1620, on board the Mayflower, before they landed in Provincetown harbor, after their very precarious voyage, evidently shows a decided intention to establish a government on the basis of equality—to unite in their code religion and liberty, morals and law. The Pilgrims were actuated by that principle which has given the first impulse to the great movements of the modern world, "*God and Liberty.*" They had the imperfections of humanity. Those exalted principles were combined with human weakness. They were mingled with the prejudices and errors of age, country and sect; sometimes intolerent, yet always reverent and sincere. When pressing their wishes to the government and enlisting the favor of some good men to assist them in their new undertaking, they put forth the following as their principle reason:

"We do verily believe and trust that the Lord is with us, unto whom and whose service we have given ourselves in many trials, and that He will graciously prosper our endeavors, according to the simplicity of our hearts."

Men who can put forth such words with sincerity, and who have embarked in a just cause, are almost sure to succeed. They may not live to gather the fruits of their own planting; others may build, but they have laid the foundation. Entertaining such views, the body was raised above weakness; it nerved the humble to withstand the frowns of power; it triumphed over the prison and the scaffold, over all kinds of suffering and deprivation; it gave also manly courage to tender and delicate women.

Whatever may be said for or against the motives our Pilgrim fathers had for coming to the New World to found a colony, they did plant deep in the fruitful soil the living principles of republican government for the admiration of mankind. Two hundred and fifty years has now passed away since this faithful colony landed upon our shore. We love to go back to our infancy and follow up the settlement of the country; to see the wilderness and the frowns of savage nature give way to homes of civilized life. The log house of the frontier settler first built on the shore of the Atlantic moved slowly but steadily, con-

quering hostile nature towards the setting sun, compelling the cabin of the trapper and the wigwam of the savage to change their homes farther and still farther to the West, and then beyond the Great West, where we now find them planting towns and cities, making governments and doing all other acts and things requisite to the establishment of healthy and prosperous homes.

The natives were not wholly alone in their would-be savage glory, for civilization has established itself across and over the continent, and they must conform or be ultimately annihilated. Every obstacle must be removed that is in the way of the extension of this growing family of great and prosperous States in the West.

"Behind the squaw's light bark canoe
The Steamer and Railroad rocks and raves,
And city lots are staked for sale
Above old Indian graves.

I hear the tread of pioneers,
Of nations yet to be;
The first low wash of waves where soon
Shall roll a human sea.

The rudiments of Empire here
Are plastic yet and warm,
The chaos of a mighty world
Is rounding into form.

Who can or will presume to assign limits to our growth or dare to compute the time table of our railway progress, or lift the curtain that hides the

crowded great events of the coming century. The noble work now established across the continent will go on. We indulge in the bright vision of healthful progress all over our land, from the first headland our progenitors saw on the Atlantic coast to the last promintory on the Pacific, which receives the parting kiss of the setting sun.

Kind reader, the only apology I have to give you for the unusual length of these articles, is their importance to us, also to the whole family of man. We too often forget (not that we are ungrateful) the beginnings of what we now are. It becomes the children of noble progenitors to turn back occasionally the well-filled pages of time, pass to where they had a parentage, where the underlying principles were established from which a nation has grown by steady steps, great and prosperous at home, and sent back to the old world the healthful influence of a better civilization, in which every soul has an interest, and can breathe freer wherever the atmosphere of heaven has worked a pair of human lungs.

"'Tis yours to judge how wide the limits stand
between a great and happy land, from ocean to ocean."

Now that freedom is established all over the land, we have no more cause of war, and peace has come to stay. We shall have prosperous continental en-

terprise from the cold North (as we now go there) to the sunny South—one government, one noble destiny.

"The Pilgrim spirit has not fled;
It walks in noon's bright light,
And it watches the bed
Of our glorious dead
With the holy stars by night!
And it watches the bed
Of the brave who have bled,
And shall guard this wide-spread shore
Till the waves of the bay
Where the Mayflower lay
Shall form and rise no more."

CHAPTER IV.

WHERE IS THE WEST?

The first settlers upon Massachusetts Bay, after exploring the country for twenty miles "out West," reported the fact with great surprise, and boasted that the soil was tillable for that entire distance.

This book is styled Beyond the West, for the reason that what is generally understood by the great productive West, seems to stop this side of the geographical centre of the continent North and South. Nature has drawn the line of demarkation between them. The central rivers of the continent—the Mississippi and Missouri—form, to some extent, the boundary. The continental centre is about half way between the Missouri river and the base of the Rocky Mountains. West of this the whole country to the Pacific is so differently made up as to be quite another country, as to the natural productions and climate. Consequently, what we mean when we speak of the Old West does not belong to this other New West. This has distinctive characteris tic features peculiar to the country, quite different from the Atlantic side.

"WHERE THE WEST IS.—Chicago is no longer a

western, but is an eastern city. It is only 900 miles to the Atlantic coast, while it is 2,350 miles to the Pacific coast. Dividing the Union into east, center and west, each division will embrace all the States lying east of the Mississippi river; the central, all the States and Territories between the Mississippi and the Rocky Mountains; and the western, all the States and Territories between the Rocky Mountains and the Pacific coast. Somewhat the largest of these three great divisions is the central. And, astonishing as it may appear to those who have not examined the map carefully, the territory lying west of the Rocky Mountains contains as many square miles as the territory east of the Mississippi river, notwithstanding this comprises eleven Southern, all of the so-called 'Eastern' and 'Central' States, and all of the old 'Northwest.' The completion of the Pacific Railway has changed the central, and moved the west 1,200 miles toward the setting sun. The actual west consists of California, Oregon, Washington, Nevada, Arizona, Utah, Montana, Wyoming, and the major portion of Colorado and New Mexico. It is hard to realize the truth that Chicago is an eastern city, and that Illinois is not even a central, but is an eastern State. Omaha, which has always been regarded as on the western verge of the 'Far West,' is in fact 150 miles east of the center of the

Union!" Consequently we can with propriety style this book Beyond the Old West.

I hope that no American citizen will let an opportunity pass to make the trans-continental journey; without it, no one can have an extended knowledge of his own country, of the great extent of our domain, our wonderful resources and our future destiny.

Chicago is the gathering-in point of Railroads. She is the center of railway commerce, East and West, and may now be called an Eastern city, which a few years ago was very far to the West; for the star of empire has left her far behind to the full enjoyment of home enterprise and home comforts. Whether the traveler to the West from New York goes by New York Central, Erie, or by Michigan Southern or Michigan Central, leaving at the same time, he is carried into Chicago almost at the same moment, a thousand miles journey. From Chicago to Omaha, where begins the Pacific Railroad, is five hundred miles, through Northern Illinois and Central Iowa by the Chicago and Northwestern Railway, crossing the Mississippi River about half way. Two more roads further South will soon be finished—Rock Island and Burlington—which will give Chicago and Omaha three separate lines nearly direct. Omaha has also communication with the great commercial city of St. Louis by the road down the Missouri River to St. Joseph and Kansas City.

It seems, however, strange that Railroads should go before civilization. Yet it is so with the Pacific, giving more ease and luxury to travelers than any other road in Europe or America, more comfortable and luxurious accommodations for railway travel than anywhere else in the world. This results from the country through which it runs. We find on no other railways as yet so elegant and ease-giving carriages as the refreshment and sleeping cars offered travelers on this new highway of nations; all the accommodations of a first class hotel upon wheels. They are the invention of Mr. Pullman, who will ever receive the grateful thanks of a grateful traveling public. He has associated his name with one of the greatest improvements in railroad travel. These cars are owned by companies and added to the trains of railroad companies by special agreement. Additional charges are required of passengers who occupy them, in proportion to the amount of room taken, but about on a par with the charges of a good hotel for meals and lodgings. To enjoy and appreciate these cars, a party of about twenty should charter the exclusive use of one, with which to make the continental pleasure trip to the Pacific. Starting from the Atlantic cities in a Pullman home, the journey across the continent to San Francisco may be made with a pleasure and comfort unequaled heretofore in all the traveler's dreams.

CHAPTER V.

THE NORTHWEST PASSAGE DISCOVERED.

Many have been the expeditions fitted out by the old countries and this, to explore the ice-bound regions of the Arctic Seas. Many noble men went out with an old Roman hardihood into these unknown Northern Seas of ice and darkness, to meet the only enemy with which they felt themselves mated. Their long years of perilous and difficult adventure in these inhospitable regions stand foremost among the heroic achievements of mankind. The most noted expedition was that of Sir John Franklin in 1845 with 135 selected men, not one of whom ever returned; but all went to explore the vast ocean from whose bourne no traveler returns.

These explorations prove, beyond all doubt, that there is a Northwest passage to India, or any other place; it is very much iced up and is a much more uncertain road to travel than Jordan. But it was reserved for the last part of this nineteenth century to discover and make the only practical highway of iron to India, or any other place in that neighborhood. If it were not for the ferry at the Pacific end, it would, no doubt, push itself directly there. However, as it is, humanity is brought nearer together; the old East has moved toward a better reconstruction of humanity.

CHAPTER VI.

OMAHA AND NEBRASKA.

Omaha, the principal city in Nebraska, rises symmetrically from the west bank of the Missouri. You see its majesty of location and its already extended improvement at one view. It being the starting place and headquarters of the Pacific Road, has imparted to the city a wonderful development, and has now a population of 18,000. It has also the river at its command, navigable for two thousand miles in either direction, with the principal work-shops of the Railroad and the lines from the other parts of the country centering around it to make their transshipments. This place is destined to become one of our great interior cities. A bridge will soon be built across the river to Council Bluffs; then the same cars can go back and forth from one end of the continent to the other.

A considerable portion of Nebraska presents good inducements to the settler. For more than two hundred miles it is washed by the tributaries of the Platte and Missouri. For some two hundred miles west from the river the land is somewhat rolling, well watered and plenty of wood. This portion of the State is being settled rapidly; well cul-

tivated farms are constantly in view, and all look healthy and prosperous as a people can who are contending anew with the unsubdued rough elements of nature. But the humble habitation of the emigrant is passed, and nature for the present, has limited his settlement in this direction.

CHAPTER VII.

THE PLAINS.

"We cross the prairie as of old
The pilgrims crossed the sea,
To make the West as they the East
The household of the free."

Here we must wait till the rivers and streams which gather in the melted snows in summer on this slope of the Rocky Mountains are damned and made to irrigate this otherwise unproductive soil, as to cereals, fruit and vegetables. But the native grass is strong and nutritious, and pasturage is unbounded; if it were not so, the countless herds of buffalo would not have fattened and roamed these plains for unnumbered centuries. This country would laugh now to be called by the approbrious name of "American desert." But the Railroad has killed, for the present, whatever cultivation these plains had received during the time of slow moving emigration, stage travel and prairie schooner freighting. The ranches and stations which were supported by this travel through the country are now abandoned, for the cars carry everybody and everything. They were the out-posts of civilization, but now the old roads are abandoned and the settlers have lost their improvements, being obliged for better protection

to move back or ahead, or gather at the railroad stations. They are the victims of a higher development; the iron-tongued locomotive calls them back to receive that prominent enterprise which she carries along with her through the country for the settler. I noticed that one class of the original inhabitants of this region remained in their old homes without fear or favor, careless and unconcerned as if there had been no change in their land. The prairie dog villages or settlements with their traditional companions remained as of old. He stood erect on the threshold of his castle, his own picket and scout, enjoying the world as of old, like a gentleman and philosopher. An honest real estate dealer, he conducts his business upon the principle that inhabitants are requisite to make a city, and never defrauds unsuspecting victims; always jovial, frolics merrily with his fellows in the warm sun, making, seemingly, his life a party of pleasure. There is a belief that the prairie dog willingly gives the owl and rattlesnake a home in his subterranean house.

I was informed by an old hunter and trapper through the country, who had good opportunities of observation, that the prairie dog consents to share his abode with these ill-assorted denizens through his inability to avoid it. Their villages are on the naked plains, where there is neither rock for

the rattlesnake nor shade for the winking eyes of the owl. These idle and impudent foreigners intrude and appropriate to themselves the labors of the industrious little animal which provides himself with a cool shelter from the burning sun, and a comfortable home to shelter him from the storm. Whenever they are driven to seek refuge from sun or storm, they enter unceremoniously and take possession.

My now friend mountain man also informed me that the rattlesnake, when other food was not conveniently obtained, would appropriate to himself a young prairie dog, and that the owl waits at the door of its appropriated (without leaf) domicil to nab a wandering mouse that might come that way, instead of going after it as an honest owl should do. However, they seem friends, for I suppose the would-be lord and master of the household dare not be otherwise for fear of ready vengeance. I have seen him when domestic troubles seemed to rack his little red doggish constitution, when it was easy to imagine he looked a lecture, each sparkling eye a sermon. Around their burrows the earth is heaped up 18 or 20 inches, from the top of which the occupants delight to survey what is going on in the community. They feed at night, are very shy, and when shot, unless killed outright, will tumble back into their hole.

Their flesh is tender, rich and juicy, which in such a country often is very desirable. They are often found many miles from any water; some conjecture that they dig subterranean wells, others that they live without drinking; during winter they remain torpid, shut in their subterranean house, and when they come out it is a sure indication of warmer weather. A remarkable sameness is observable in the topography and geological features of these plains, presenting a great contrast between the rich green prairies of Illinois, Iowa, Missouri and a portion of Kansas.

"Away, away, from the dwellings of men,
To the wild deer's haunt and the buffaloes glen."

No active, living town now marked the lonesome plain to beat and throb from life's great business vein. The vision wanders over the boundless expanse, stretching all around to the horizon. The traveler startles at the thrilling sensation, the illimitable freedom; his mind and body both seem to have entered another country, expanded as the boundless imagery that is spread in distance around him.

After many days and weary nights of travel, in the dim outline of distance to the northwest was seen Long's Peak, clearly defined against ominous black clouds, more than a hundred miles ahead.

Next is seen Pike's Peak; at length the whole western horizon seems bounded with clearly defined mountain ranges, towering up, standing against the sky, large, massive and sublime, having the appearance of low clouds more than mountains.

CHAPTER VIII.

DENVER CITY.

Denver City is pleasantly located under the shadow of the mountains, on the South Platte; is substantially built of brick and wood; has good hotels, banks, a United States Mint, some fine blocks of buildings, and is the business centre of a large section of country.

The town is settled down and is much more substantial now than when I visited it before. It has lived through its fast and fickle days, when drinking and gambling reigned supreme, when "to be or not to be" was the all-absorbing question with those owning real estate and doing business. The problem is now solved. Denver is a fixed fact—has all the elements in and around her to become a prosperous, wealthy city. Her central location, contiguous to the mountains and the plains in this section of the State, gives her an agreeable climate the whole year—gives her the outgo and the income of all the mining districts. Denver is also the principal market for all the agricultural productions of the farming counties; also the central place for travel to and from the mountain mining regions; also north to the Railroad and south to New Mexico. With

these local facilities, and with an enterprising, intel, ligent popuiation already of about five thousand, growing from within and without, and not wholly by importations, it will soon have the Pacific Railroad on the St. Louis route, connecting her with the branch of the Central that comes down from Cheyenne, giving her ample railroad advantages.

CHAPTER IX.

THE MOUNTAIN RANGES.

Here, from the door of our hotel, we contemplate in wonderful grandeur the mountain ranges, nature's magnificent panorama, such as never feasted the hard-earned glories of human effort, equaled only by the Great Artist—face to face with God's wonderful yet beautiful handiwork.

The continental mountains dwell here in magnificent proportions, extend themselves in reckless luxuriance of conscious greatness, and invite the nation to her for strength, for wealth, for the most healthful recreation. They may truthfully be called the Mother Mountains of the continent. Starting from an elevation on the plains of over five hundred feet, these mountains go up eight, ten, eleven and twelve hundred feet above the sea level. Peaks are scattered every where. This hight, indeed, they are the mountain ranges. They do not form a line, ascending from one and descending to another valley, but are many lines folded together and resting on each other in remarkable confusion, the range that divides the waters that flow to the Atlantic from those going to the Pacific. "The divide" runs

very irregular, making quarter and half circles, and then returning to its mission as a north and south line. Within its leviathan folds are other divides, making other feeders of the same river, and other ranges with peaks as high as the parent among them all, occasionally, as if weary with perpendicularity, give way to plains, with all the characteristics of plains outside the mountain ranges ; and then the added pleasure of having little mountains of their own to make more interesting the landscape, while up and around them are stationed the old grand patriarchal sires, to guard and enfold what are known as the Parks.

CHAPTER X.

ASCENT OF PIKE'S PEAK.

As none of the Rocky Mountain Peaks have such universal notority over the country as Pike's Peak, although not ascending it myself, I have thought proper to give A. D. Richardson's description of his party's ascent, for the benefit of the general reader.

The distance from Colorado to the summit of Pike's Peak as the bird flies, is five miles, by the nearest practicable route about fifteen.

A Colorado gentleman who had once made the trip, became our guide, philosopher, and comrade. Early in the morning, escorted by a party of friends, we rode to the Fountain Qui Bouille, stopping for copious draughts of that invigorating water. A mile further, the canyon became impracticable for vehicles, so that carriages turned back and we began our pedestrian journey.

Like Denver and Golden City, our starting point was higher above sea-level than the summit of Mount Washington. Six athletic miners, ranch-men and carpenters who chanced to be going up that morning, lead the caravan. Our own party of five, in single file, brought up the rear. We were each

provided with a stout cane and a drinking cup. The ladies were in bloomer costume, with broad-rimed hats and light satchels suspended from their belts. The unhappy trio of men in thick boots and heavy woolen shirts, without coats or waistcoats, carried revolvers, knives, and hatchets, and bent under their heavy packs of provisions and blankets. My own weighed twenty-one pounds and I thought full twenty-seven hundred before the weary journey was ended.

The steep narrow canyon, unmarked by any trail, abounded in smooth precipitious rocks, impassable for any quadruped less agile than a mountain goat. Along the bottom of the gorge, a brook leaped and splashed over the rock in a stream of silver. The overlooking hills were thickly studded with shrubs of oak and tall trees of pine, spruce and fir. Wild cherries, hops, and clustering purple berries grew in profusion.

The valley abounds in gems of beauty, "pocket editions of poetry in velvet and gold."

We made our noon camp at one of these, which would cause the heart of an artist to sing with joy.

The brook, first appearing in view under a natural stone bridge above us, comes tumbling down in a cascade of snow white foam, torn into sparkling fringes by the jutting rocks, and is lost among the huge boulders at our feet. An irregular mass of

granite rises upon one side more than a hundred feet, and on the other bank the singing waters are shaded by tall pines and blue-tipped firs. Between and beyond their dark branches, a gray cone-shaped hill, bare of tree or shrub, stands in the back ground against a wonderfully blue and pellucid sky.

A lively shower soon recalled us to the practical, when it was discovered that our whisky, through defective corking, had escaped from the bottles. It might prove a serious loss in case of great exhaustion; but after boiling our tin-cups of tea by a fire of branches we started on.

The afternoon climb was still along the canyon, sinking knee deep into the gravelly hill; clutching desperately at friendly bushes to keep from falling backwards, and toiling upon hands and knees over wet, slippery rocks. At four o'clock, cold and weary, we encamped where our advanced party had already halted. Supper was prepared and eaten before a glorious fire of tree trunks; then the deep woods resounded with laughter and song. But long before midnight we all slept, watched by the sentinel stars, which haste not, nor rest not, but shine on forever

On the second morning we made hasty toilets with the brook for a mirror, and consumed our fried pork, biscuit, and cups of tea while sitting upon logs. We continued through two rugged canyons, with a

smooth grassy valley between. Many of the mountains are streaked with broad bare tracks, left by land slides. Vast masses of disintegrated granite are piled upon each other in dreary wastes. One huge stone chair overlooks a little kingdom of mountain and valley, but the Titan who sat upon it was long ago dethroned in one of nature's terrible convulsions, which uprooted hills, and scattered granite boulders like pebbles.

The burdens already hung like millstones about our necks. I began to comprehend the immotions of a pack mule, and to wonder whether a man to carry twenty-seven pounds of blankets up Pike's Peak, did not belong to the long-eared species himself.

A cold rain set in, and at noon, drenched and shivering, we encamped under a shelving rock. We kindled a fire and dined upon a rabbit which had surrendered unconditionally to a revolver. The only true philosophy of getting wet is to get soaked. Moist clothing brings a hesitating discomfort, but in feeling that every thread is drenched there is a desperate satisfaction. So we went forth in the driving rain, and feasted upon ripe raspberries, which grew so abundantly that one could satisfy his appetite without moving. Then we returned to camp thoroughly saturated, and throughout the afternoon made

sorry essays at reading and whist playing. Early in the evening our robust Colorado friends, who had gone a mile beyond us, passed by on their return, having given up the trip as too severe. We gathered an ample supply of wood. The dead pines, often six inches in diameter and thirty feet high, were easily overturned; their brittle roots snapping like pipe stems. As the fire was our only solace, we piled on logs until the red flames leaped high and chased the thick darkness away. Four of us huddled under the rock, while the fifth, as the least of two evils, sat grimly in the open air, wrapped in his blanket and brooding upon destiny. The rain became very violent, and the natural roof sloping unfortunately in the wrong direction, showered the water upon us in melancholy profusion. After many dismal jests about our dreary situation, one by one my co-tenants dropped asleep. My own latest recollection of that procrustean bed was at eleven o'clock, when I was wooing the drowsy god with my legs in a mud puddle, a sharp rock piercing my ribs, and a stream of water pouring down my back. At midnight my friends arose, for the air had grown very chill, and sought our great log fire. After enjoying for a few minutes the comforts of its red flames, a comfort mitigated by the pelting rain, wrapping myself again in a wet blanket, and creeping as far

as possible under the rock, I soon slept soundly. At daylight when I awoke they were still out in the driving rain, sitting before the flames in glowing contemplation, like Marious amid the ruins. On the third morning we breakfasted morosely, sore and stiff in every joint.

Less than half the journey was accomplished, and we had but one day's provisions remaining. One of the ladies had worn through the soles of her shoes in several places, and both were wet, chilled and exhausted, but they would not for a moment entertain the idea of turning back.

By seven o'clock we were again climbing the slippery rock. The rain ceases, the breaking clouds once more turn forth their silver linings

> "And genial morn appears,
> Like pensive beauty smiling through her tears."

Behind, at our feet, stretches an ocean of pure white cloud, with mountain summits dotting its vast surface in islands of purple and crimson. Before us towers the stupendous peak. In the genial sunlight we begin to feel the comfort of dry clothing for the first time in twenty-four hours, and press cheerfully on. The hills, swept for miles and miles by vast conflagrations, are black, and bristling with the tall, dead trunks of pine and fir, like the multitude of masts in a great harbor.

The valleys are shaded by graceful aspens, whose leaves quiver in the still air, and carpeted by luxuriant grass rising to our chins, and variegated with flowers of pink, white, blue and purple. Fallen tree trunks abound, held by their broken limbs three or four feet above the ground. Climbing over them is very laborious, and tears to shreds the meager skirts of the ladies. The bloomer costume is better than full drapery. But for this trip women should don trousers.

After five hours climbing slippery rocks, we dine luxuriously in a raspberry path, drinking tea from our cups and water from a spring.

Thus far our journey has been only among foothills. Now we reach the base of the peak itself, and climb wearily up the rocky canyon which extends from base to summit. The thin air makes breathing very difficult. At five o'clock we encamped, utterly exhausted, with wild eyes and flushed faces which excited fears of fever and delirium. The ladies fell asleep the instant we stopped, and one of the masculines sank upon the ground. Two of us started for water down the stream bed ten yards distant, but found it dry as Sahara. So we limped down the gorge for half a mile, and in more than an hour reached camp again, each bearing two cups. My companion had barely strength to articulate that he

would only repeat the walk to save his dearest friend from dying. I succeeded in gasping out an injunction to take precious care of the costly fluid, and we lay down utterly exhausted. But the strong tea, as usual, revived us all, and we started on just as the clouds broke, revealing the mountains and vast green prairies far behind us, a dream of beauty. Two of the party suddenly yielded to illness, accompanied by vomiting fits, and reaching the verge of vegetation we encamped for the night. As we rolled ourselves in blankets upon the ground beside our roaring fire, another shower drenched us, and then turned to hail. At nine o'clock our guide reaped the harvest of his exposure and fatigue in distressing rheumatism, which drove him from his earth bed, and held him writhing in pain during the night, but disappeared with daylight's return.

On the fourth morning ice was lying thick about our camp. All the party wore a lean and hungry look, but our scanty larder allowed to each only a little biscuit, a bit of meat as large as a silver dollar, and an ample draught of tea. At five o'clock we left our packs behind and resumed the march.

In climbing Mount Washington the vegetation grades down regularly from tall pines to stunted cedar shrubs with trunks five or six inches thick, and branches not more than three feet high, running along like grape vines.

Pike's Peak affords a sharp contrast. We started in a dense forest of pines and firs, but vegetation ceases so abruptly that in ten minutes we stood upon the open, barren mountain side, with no green thing about us except a few flowers and beds of velvety grass among the rocks. The remainder of the ascent is very abrupt. We followed the line, which in the distance had appeared like a path, but now proved a gaping gorge a mile in width. The summit seemed very near, but we toiled on and on for hours up the sharp hight. The thin air made it impossible to go more than a hundred feet without pausing for breath; but among the grand scenery we forgot our fatigue and remembered our weariness no more. The ladies, imbued with new life, could only find expression in singing the old hymn:

> "This is the way I long have sought,
> And mourned because I found it not."

Tufts of wood indicated the haunts of mountain sheep, an animal of unequaled agility. He leaps incredible distances down the rocks, and is even reputed to strike upon his broad horns, which receive the most violent concussions without injury. The sky assumed a deeper, richer blue, and the fields of ice and snow began to enlarge. Even here hundreds of tulip-shaped blossoms of faint yellow, mingled with purple, opened their meek eyes beside

the freshly-fallen snow! It was worth all our toil to see the cheek of June, with its purple flush, nestle among the silver locks of December. Finally the last flower and blade of grass were left behind and only rocks and snow ahead. It became difficult to avoid falling asleep during our brief pauses. Just below these we turned southward to look down a tremendous chasm known as the "Crater." It is half a mile wide, nearly circular, inclosed by abrupt walls of rock, and fully twelve hundred feet deep. Creeping to the verge of the dizzy hight, while our comrades clung to us with desperate clasp to save us from tumbling over, we dislodged huge rocks into the abyss. Down they leaped, bounding from ledge to ledge, striking sparks and scattering showers of fire, with great crash and roar, that came rolling up to us like peals of thunder long after they were out of sight. One overhanging rock affords to the spectator, lying flat upon his face, an excellent view of the yawning gulf, though its uncomfortable tumbling disquiets his nerves.

At last, just before noon, passing two banks of snow which have lain unmelted for years, perhaps for centuries, we stood on the highest point of Pike's Peak. The ladies of our party, one a native of Boston, the other of Derry, N. H., were the first of their sex who ever set foot upon the summit.

Pike's Peak was named in honor of General Zebulon M. Pike, a gallant young officer, who discovered and ascended it in 1806, while at the head of an exploring expedition sent by Jefferson's administration. A few years later, before he had reached the prime of life, he fell in the defence of his country's flag, at the battle of Toronto.

The summit embraces about fifty acres. It is oblong and nearly level, composed wholly of angular slabs and blocks of disintegrating granite. We found fresh snow several inches deep in the interstices, but the August sun had melted it all from the surface.

We were fortunate in having a clear day, which gave us the view in its full sublimity. Eastward for a hundred miles, our eyes wandered over dim dreary priaries, spotted by dark shadows of the clouds and the deeper green of the prairies, intersected by faint gray lines of road, and emerald threads of timber along the streams, and banded on the far horizon with a girdle of gold. At our feet, below the now insignificant mountains up which we had toiled, stood Colorado, a confused city of Liliputs, and our own carriage with a man standing near it. Further south swept the green timbers of the Fountaine Quie Bouille, the Arkansas and the Huerfano, and then rosé the blue Spanish Peaks of New Mexico a hundred miles distant. Eight or ten miles awa

two little gems of lakes were set among the rugged mountains holding shadows of the rocks and pines in their transparent waters. Far beyond a group of tiny lakelets—(eyes of the landscape) glittered and sparkled in their dark surroundings like a cluster of stars. Toward the north we could trace the timber of the Platte for seventy miles, almost to Denver. To the west, the South Park and other amphitheaters of rich floral beauty, gardens amid the utter desolation of the mountains, were spread thousands of feet below us, and beyond, peak upon peak, until the pure white wall of the Snowy Range rose to the infinite blue of the sky. North, south, and west swept one vast wilderness of mountains of diverse forms and mingling colors, with clouds of fleecy white, sailing aerial among their sacred and rugged summits.

We look upon four territories of the Union, Kansas, Nebraska, Utah, and New Mexico, and viewed regions watered by four great rivers of the continent, the Platte, Arkansas, Rio Grande and Colorado; tributaries respectively of the Missouri, the Mississippi, the Gulf of Mexico and the Gulf of California. Upon the north side of the peak a colossal plowshare seems to have been driven down from the summit to the base, its gaping furrow visible seventy miles away, and deep enough in itself to bury a mountain of

considerable pretensions. Such enormous chasms the armies of the Almighty must have left in heaven when to overcome lucifer and his companions,

> "From their foundations loosening to and fro,
> They plucked the seated hills with all their load,
> Rocks, waters, woods, and by the shaggy tops,
> Uplifting, bore them in their hands."

At the gorge's head, some enterprising fellow had posted a railway hand-bill, which, with finger pointing directly down the gulf, asserted in glaring capitals, "shortest and best route to the east." It seemed impossible to grow weary of the wonderful picture, but my companions, though wrapped in heavy blankets were shivering with the cold. So we iced and drank a bottle of champagne which a Colorado friend had thrust into one of the packs, and then like more ambitious tourists placed a record in the empty bottle, which was carefully re-corked and buried under a pile of stones. We spent a few minutes in school boy pass-time of snow balling; then, after two hours upon the summit, we reluctantly commenced the descent, for living without eating was becoming a critical experiment. Our guide, weakened by the hard journey, missed his foothold, falling upon a jagged rock. Fortunately the metalic case of his spy-glass saved him from a fractured rib, and after lying upon the rocks for a few minutes he came limping down with the rest. In descending,

the rarity of the atmosphere did not retard us, but we found climbing down quite as exhausting as climbing up, and a raspberry diet is not invigorating.

At five o'clock we reached the last night's camp, glad to break our twelve hours' fast with ample cups of tea and homeopathic fragments of bread and meat. After a brief halt we hastened on down the ledges and over tree-trunks.

When we sat upon a log for a little rest, one of the ladies appeared utterly exhausted. We asked if we should not camp until morning that she might recruit? She could not articulate a single word, but shook her head with indignant vigor. Again pressing on, an hour later we kindled a fire, went to bed, or rather to blankets, and we were instantly asleep.

On the fifth morning when we awoke, only that expressive colloqualism which the fire companies have added to the vernacular could describe our condition; we were "played out." We swallowed our last provisions, a morsel of meat and a tablespoonful of crumbs each. The unfailing tea measurably restored us, but in our exigency we would gladly have exchanged it for the cup which cheers and does not intoxicate.

We descended by a new route over hill sides, crossed and recrossed by tracts of grizzly bears, and through canyons surprising us constantly with a

new wealth of beauty, which we were hardly in condition to appreciate. After journeying five or six hours, we experienced, not the knawing of hunger, but that irrestable faintness which the Irishman so exactly described as "a sense of goneness." Endeavors to talk and think of other matters were fruitless, the "odorous ghosts of well remembered dinners" would stalk unbidden through the halls of memory, and in vain we sought to

> "Cloy the hungry edge of appetite
> By bare imagination of a feast."

At noon we halted by the cascade which had so enchanted us on our first day's march, and slept for an hour under the shading pines. Then we shouldered our packs for the first time and hobbled on down the canyon.

At four o'clock our guide, who was a few yards in advance, suddenly came upon our waiting carriage. Now that the strain was over, the nerves of the ladies instantly relaxed. One received the intelligence with a shower of tears—the other with histeric laughter. In a moment we were surrounded by Colorado City friends, who, alarmed at our protracted absence, were out in several parties, armed with stimulants and provisions, searching for us among the foot-hills.

Two hours later we reached the town. My com

panions, with haggard cheeks and blood-shot eyes, seemed but shadowy suggestions of their former selves. Each of the ladies had lost just eight pounds of flesh in less than eight days. One, whose shoes were cut through by sharp rocks early on the journey, had been walking for three days with portions of her bare feet striking upon the stones, gravel and snow. We were soon clothed and in our right minds, and eating heartily.

No lasting inconvenience was experienced from the trip, except the most ravenous and uncompromising hunger which continued at intervals for the next two weeks. If "he is well paid who is well satisfied," the journey was far the most remunerative any of us had ever taken.

This Peak is surrounded by several ranges of mountains rising gradually from the plain, with large and small valleys between, so that a carriage can only get within four or five miles of the base of the mountain proper. A party wishing to make the ascension ought to take pack horses; then they can get over all the space from Colorado City to the main ascent with little difficulty, and the party being vigorous, can then gain the peak without excessive fatigue, and the tourist will experience no inconvenience, "no evil will thence ensue," but a pleasure in making it. I was informed by a party who had

made the ascent, that they managed in this way: left their horses at the base of the mountain, made the ascent, remained on the summit two hours and returned to their horses the same day. These were of course experienced mountain men, and could go up and over more mountains in a single day than a party like the one described could in four or five. This was my experience when I first went to these mountains, it was all I could do to look up to some of them, and have a kind of weak-kneed, cushioned-chair, feather-bed country atmosphere faint-heartedness. But after a few months, getting the lungs adjusted to the new atmosphere, and the additional strength of mountaineer life, brought down these before formidable mountain peaks, within the ability and strength of mortals here below.

We have given the ascent of two principal mountains that the reader might have a full knowledge of their piled up magnificence, nature's pyramids.

CHAPTER XI.

THE ROAD TO SOUTH PARK.

You are invited to go with me to South Park, something over a hundred miles from Denver, passing over one of the most interesting roads which penetrate the mountains.

The pleasant valleys, with their sleepless meandering crystal streams, covered with green buffalo grass, mingled with wild flowers, the easy divide, the gentle slope of the low foot-hills, pictured with small groves of trees having a very heavy foliage, together with the remarkable rock and earth formations, presenting the appearance of extreme old age, arranged by the operative elements of nature, during long centuries, into beautiful architectural grandeur; remarkable specimens of detached rock in the monument region, towers and pyramids hundreds of feet high, scattered thickly over hundreds of acres, in the midst of large trees, together with the smaller pillars, statues, pagan idols, cardinals, friars, picturesque large and small cottages, Siamese twins, and a numberless variety of images, may be detected among them, differing in color and shape, presenting a scene of unusual beauty and magnifi

cence—some located upon hills, like great temples built by human hands. One is known as Table Rock, another Castle Rock, and another as Signal Rock, from signal fires which the Indians formerly built upon it. Capital Rock takes the form of a strong fortification, with massive walls and arched gateways, let out to the slow but strong and sure hands of time, when taken down and made an unsystematic mass of ruins. They culminate in huge walls at the south, known as the gardens of the gods. Enormous columns of red rock rise perpendicularly for three hundred feet. Through this natural gateway we passed into a beautiful enclosure, walled up on every side by very high mountains—truly a garden for the gods. One isolated rock has a cave eight feet by sixty, and seventy feet in hight, with walls smooth and seamless. They challenge the admiration of the beholder—impress upon him the idea of a great mountain cemetery, such as Egyptian kings never built to perpetuate ignorant ambition. Then, too, the deep canyon, with mountain walls on either side, and its sparkling waters. Here truly are "books in the running brooks," if history be true. The view from the entrance to the Park is a landscape of arcadian beauty. Magnificent evergreen mountain slopes within the range of vegetable life, with naked tops above, internally

broken into valleys, divided into low ridges, a variety of hot and cold sulphur springs, healthful for bathing; rich salt springs, wild game and fish, together with an agreeable climate during the summer season, makes this park a source of pleasure and profit in a country such as this. The prospecting miners' discoveries in and about it for gold, have been quite successful. Much placer mining in many of the valleys have amply rewarded the labor of the persevering miner. Consequently roads have been made through it and settlements about it—many of them almost abandoned after the mines were worked out. Few places offer more remarkable combination of plains and mountains; they come towards each other and mingle like an affectionate family in beautiful association. Wide fields of prairie open out before the eye, upraise the vision, and magnificent snowy mountains carry the sight to the clouds. Between these scenes of natural beauty are gently rolling hills, thick diversified groves, clear and beautiful brooks, blending nearly all the delightful panorama of natural grand scenery that hill and dale, mountain and plain, winter and summer, snow and vegetation, trees and rocks, transparent lakes and waste can present in comparison, not from one place, but from day's journey to day's journey, ever changing in beautiful alliances.

An intelligent miner told me that nearly all this park was rich in gold—would pay from three to four dollars per day to wash it over. But I hope it will not be done, at least till after every body has visited these mountains and parks, for the business leaves great waste in its track.

"The San Louis Park" lies along and around the Arkansas and its tributaries in Southern Colorado and Northern New Mexico, and is the largest and, perhaps, the most varied of the series of great parks. It centers about a grand lake, and is rich alike in agriculture and mineral promise.

"The Indians have robbed us of our promised peep into its lines, and we know it only by its kinship to those we have visited, and the enthusiastic description of those to whom it is familiar." The South Park, however, is a favorite place for very many Coloradians, and others, perhaps, on account of more easy access, and its attraction more generally known. The salt works here, from which the country is supplied with that necessary article for domestic use, and for mining, is largely manufactured; also the hot springs, boiling up from the ground, very strongly impregnated with soda. One has a basin three feet in diameter, rising from the midst of a seeming great rock, like the High Rock Spring, Saratoga, through which a large body

of water gushes up with great force. Coloradians and others mix their flour in this water, without soda or salaratus, making light and good bread. When mixed with tartaric acid and lemon juice, it will foam like champagne, and is as agreeable as any that can be had at an artificial soda fountain. It is said to possess desirable medicinal properties; and the location, combining so many objects of interest and grandeur, will, when the railway is made, be a pleasant summer resort in the alluring park. It lies closely in the lap of the mountains; Mount Lincoln on the northwest to keep sentinel, and protect it from destructive storms, and feed it from its melting snows; while Pike's Peak on the southeast shadows it from the heated rays of the sun.

Notwithstanding the great elevation of these parks, the traveler has in summer very agreeable sunshine and an exhilarating atmosphere. Here vegetation grows much higher up than it does in other parts of the country. In the White Mountains vegetation stops at an elevation of five thousand feet. But here the mountain ranges begin to lift themselves up out of the plains at that altitude, and some kinds of grain and vegetables grow here at seven and eight thousand feet above sea level.

These now romantic parks were long centuries ago walled in mountain seas. The road by which

they departed to the ocean, when the mandate went forth, calling the waters together, are clearly marked, leaving unmistakable evidence, such as oceanic waters always leave behind. There can be no doubt but that ocean water once covered this country, for sea shells and various kinds of fishes, and small animals are found here petrified, such as are only found in salt water. Some have been found here ten thousand feet above the level of the sea. Do you suppose that the oceans ever covered this continent to such a hight? I cannot but think that the ocean once covered all this country, and when the great upheaval took place the mountain ranges were brought forth from under the ocean, and that these great parks were originally dammed up mountain seas, and that in time they made a channel through the low divides and went back to their mother ocean—leaving in their places the fossil remains, the garden of the "gods and the fountains that boil."

The little miners' town of Montgomery is almost hid in the northernmost part of South Park, under the divide which separates it from Middle Park; the easiest and much the best place to go from one to the other. I would advise all who wish to do so to go this way and not by the way of Gray's Park which is much more tedious and accomplished only by hard labor.

I had now been in the mountains sufficiently to learn by some hard experiences that many of the towering edifices of nature, though grand and majestic to the eye of passing travelers, will assume new ideas of magnitude when attempted to be ascended to the top.

"As on through life's journey we go, day by day,
There are two whom we meet at each turn of the way,
To help or to hinder, to bless or to ban,—
And the names of the two are "*I can't*," and "*can*."

"*I can't*" is a dwarf, a poor, pale, puny imp,
His eyes are half blind, and his walk is a limp;
He stumbles and falls or lies writhing with fear,
Though dangers are distant, and succor is near.

"*I can*" is a giant; unbending he stands;
There is strength in his arms and skill in his hands;
He asks for no favors; he wants but a share
Where labor is honest and wages are fair.

"*I can't*" is a sluggard, too lazy to work;
From duty he shrinks, every task he will shirk;
No bread on his board, and no meal in his bag;
His house is a ruin, his coat is a rag.

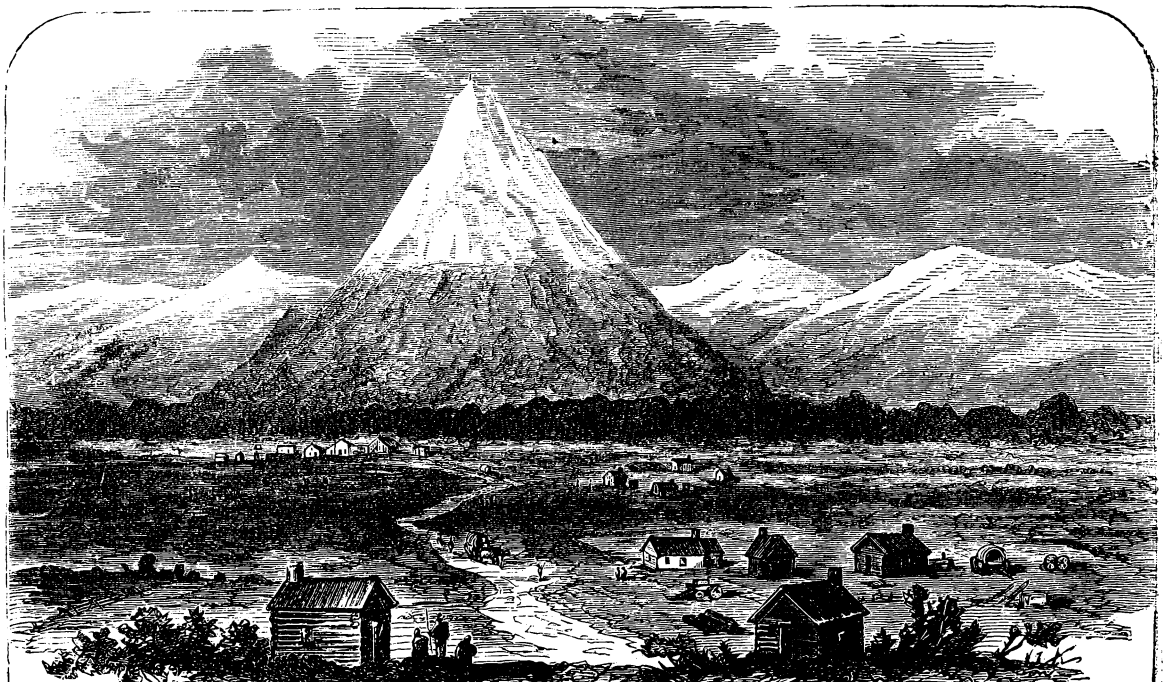
"*I can*" is a worker; he tills the broad fields,
And digs from the earth all the wealth which it yields.
The hum of his spindles begins with the light,
And the fires of his forges are blazing all night.

"*I can't*" is a coward, half fainting with fright;
At the first thought of peril, he slinks out of sight;
Skulks and hides till the noise of the battle is past,
Or sells his best friends and turns traitor at last.

"*I can*" is a hero, the first in the field;
Though others may falter, he never will yield;
He makes the long marches, he deals the last blow,
His charge is the whirlwind that scatters the foe.

How grandly and nobly he stands to his trust,
When, roused at the call of a cause that is just,
He weds his strong will to the valor of youth,
And writes on his banner, the watchword of truth!

Then up and be doing! the day is not long;
Throw fear to the winds, be patient and strong!
Stand fast in your place, act your part like a man,
And, when duty calls, answer promptly, "*I can.*"



MONTGOMERY CITY—MOUNT LINCOLN.

CHAPTER XII.

MOUNT LINCOLN.

Having procured a guide, we left the picturesque little town of Montgomery in the early morning, and slowly wound our way from the habitation of man up through the thick forest, where nature's great heart beat strong amid the trees until we reached the limit of timber, where the trees dwindled to dwarfs a foot in hight, with trunks six to eight inches through, having long, low branches lying on the ground, twisted into contortions by the storms which pass over them; then came a few blades of grass to the acre, little scattering flowers, very small in leaf and blossom, red, white and blue; next came moss and lichens, the last condensed expression of nature, which terminated at the snow line. Here the field of granulated snow and ice began to enlarge; soon all kinds of life were left behind—only loose-lying rocks, intermingled with snow and ice in wild confusion. Passing a small lake in the side of the mountain, which, as I was informed, had ever been covered with ice, thawing enough in summer only to loosen the ice a little from the sides, and stopping often to rest the lungs, tired of their expansion

in inhaling the light air, the heart and lungs now worked as they never did before, shaking our very bodies in their hurry to keep up with their work to get even with the air. After climbing over blocks of granite, volcanic rocks, fragments of quartz and lava piled up in the wildest confusion, quite exhausted we reached the summit, and sat down upon the very crest and devoured the little we had brought for the inner man—15,000 feet above sea level, 2,000 feet higher than Long's Peak, and 3,000 feet higher than Pike's Peak. The summit terminates in a small space, about an acre of loose rocks and ice.

"This was the way I long had sought."

I never realized such poverty of language as when I stood upon that commanding peak. The scene is more than a recompense for the travel—the most magnificent view in all my mountain wanderings. It takes a place beside the few natural wonders of the world. Such wonderful sweep of distance, such sublime combination of hight, breadth and depth, such welcome to the immortal thought, uplifting mortal littleness almost into the presence of God!

"The world, how far away it seemed, and God, how near!"

We can easily fancy the genius of solitude sitting for ages on that desolate mountain peak, recording upon its strong, stony tablets uncounted centuries

of desolation. Its sides are precipitous and rent with deep, dark chasms hundreds of feet deep, into which the light of day never penetrates. Few ever beheld a more magnificent prospect, seldom equaled, and excelled by none—a wilderness of mountain ranges.

Colorado is before you; the magnificent parks as seen from here, with their undulating hills, transparent brooks and lakes, enclosing slopes of forests, green pastures, together with "Lo! the poor Indian," who, I presume, here sees truly the Great Spirit in the clouds and hears him in the winds, and the wild animals that live in them—presenting a view of unsurpassed extent and varied beauty, worth a journey across the plains. You look over Long's Peak north to Decotah; you survey the hills of Utah to the west, stretching far away toward the golden shores of the Pacific; you look over Spanish Peaks south into New Mexico, and turning to the east your vision wanders over Pike's Peak, to where the extended plains appear to be spread out like a great ocean, and seem to rise up like the bosom of the deep, ever conscious of its own immensity. Here the Atlantic and Pacific Oceans met, and here they parted—the ridge poll of the continent north and south, once the dividing line between Kansas and Utah. Here are centered the white folds of four separating moun-

tain ranges, ranges of eternal snow. Here the great rivers, the Platte, Arkansas, Colorado, the Rio Grande and the Blue, sired by the eternal hills and wedded with the sea flowing to the two oceans, rising together, go off east and west towards the rising and the setting sun, begin their journey in the eternal snows of the dividing range. From its sides these great rivers take their beginning with which to feed both oceans, whose waves age on age have rolled to meet these mighty streams.

As we were about to return, a huge black cloud came hastily over the mountain tops from the west, and soon piercing blasts of wind shrieked among the rocks, and snow darkened the air when we began our return. We soon became charged with electricity, so that our hair seemed full of bees, and sparks flew from the ends of our fingers with a hissing sound. Lightning danced around and over the rocks, and played about us, quite blinding the sight. We felt like "fleeing before the Lord," but as our bodies were charged equally with the mountain, there was no danger.

There is a sublime grandeur in these elements as they are presented here. I was reminded of that remarkable interview between man and his Maker, when, amid thundering and lightning, and a fearful quaking of the mountain, He gave to his chosen peo-

people the tables of his law. Black clouds rolled over each other a mile or more below us like great monsters in the ethereal ocean. We remained till the freezing air and the rapidly falling snow (as it was in July) chilled us, when we began to return. Slowly feeling our way down through the clouds, we retraced the tedious hard-going way to the valley, and gained the town in early evening, having traveled about sixteen miles.

In honor of the President, under whose administration the territory had been organized, the peak was a few years ago named "Mount Lincoln." Let other States erect their monuments to perpetuate the name and great deeds of the noble dead. Colorado has this monumental mountain, more enduring than brass and loftier than the pyramids. Storms may sweep over it, quartz mills may stamp their iron feet beneath its shadow, tunnels may pierce its sides, and the mineral wealth of centuries be poured out into the treasury of the world, but its foundations will remain unmoved. Its base is clothed in nature's beautiful wreath of evergreen, while its top reaches so near the heavens as to attain the spotless purity of eternal white.

CHAPTER XIII.

THE MIDDLE PARK.

As we have said, Montgomery is the easiest place to reach this park, only a single divide between them, which is easily traveled over with wagons, as a very good road was made along the mountain side a few years ago, to bring quartz down from the other side of the range.

Starting right early in the morning from the town, the summit was soon reached, and we stood where the waters of the Atlantic and Pacific start off almost from our feet. I would advise all pleasure travelers to visit this place. The picturesque landscape, the two parks as seen from here, present a view hardly to be surpassed, if ever equaled, even in Switzerland or in the mountains of New Hampshire; no traveler's pen would presume to properly describe it; must be seen to be appreciated—the isolated presence of majestic nature.

Our road lay from here down the Blue river sixteen miles to Breckenridge—the first six or seven we passed over one immense snow field. With our early start in the morning we were able to get over on the crust; whereas, had we waited till near mid-

day, it would have been passed with much hardship after the crust melted. Some mountain men have snow shoes about ten feet long, turned up a little in front, with a place in the center for the foot; with these and a stick about the same length, to hold one end in the hand and drag the other on the snow for bracing, they travel over these snow fields with ease and rapidity.

The valley is narrow, descends for sixteen miles, some places but a little wider than the river, with mountain peaks going up sharply on either side, clothed in snow.

This country confounds the almanacs, makes July January, and January July—reverses the seasons, and then reverses them back again. All the different seasons of the year are represented at one place here, within the vision of a single view.

While we were in South Park, our bodily man was cared for, among the various mining towns—but now on leaving Breckenridge, reluctantly however, as spring supplies had not then arrived, we were obliged to set up house keeping for ourselves and family, the highly romantic and heroic mode of eating and sleeping one's self. But as "man wants but little here below," a coffee pot, frying pan, jack-knife and a pair of blankets is a fair setting out in this country, for the most respected and wealthy, for

those that move in the best society. Being thus furnished and supplied, we go out somewhat after the manner of the "prodigal son"—being well down in the park, having come down hill all the way for sixteen miles, and yet it is eight thousand feet above sea level.

This park is large enough to make a New England State, is the summer home of some of the Indian tribes; in winter they move further south. No grain or vegetables can be grown here on account of the altitude.

This park is much more broken into hills and winding valleys than the other, its frequent irregularities and ranges of hills break the plain and changes from bottom land to light, cold gravelly upland, with bunch grass in places. Slow moving streams and quick streams alternate; further away are ranges thickly wooded, and still further on are the ranges which bound the park and enclose it in eternal snows. The sun is warm, and some of the valleys are rich with grass, yet the tourist seems to breathe in the prevailing impression of a certain kind of stintedness. It is found in the earth, in the leaf, in the grass, and hangs around the mountains. The altitude is such as to make all kinds of vegetation dwarfish. An abundance of good grass in the lower valleys and along Grand River in summer, where

animals will not only live but fatten upon them, which is the only real use this park will give the white man, but it is the Eden of the Ute Indians; here they can extend their arms and thank God for the freedom of their existence. Here in the midst of the mountains, unmolested, where wild game and fish are within their reach, away from any path of civilization, they continue to live as the free children of nature.

In a romantically pleasant spot I found about a hundred lodges, a village of the Ute Indians, on the bank of Grand River, near the Hot Spring. The dogs were the only party that gave us a fighting greeting. We knew them friendly, and I had had experience enough with them to know that once in their village, on their hospitality, all danger was passed while with them. Begging and good fellowship was manifest everywhere, always "heap hungry," ever begging. Yet mountain and streams are at your disposal, should they be needed. They never forget to ask for (tea cup) biscuit, they will exchange any thing they have for this or flour. As I intend to devote a chapter in this work to the red man and his family I leave them for the present.

The Hot Springs of this park are the principal attraction, together with good hunting and fishing, and with an unusually healthy air, makes it an

inviting resort for the pleasure seeker and the invalid. They are a curiosity and a virtue, are now a considerable resort for Coloradians and others in the summer season, and when a more practicable road is made to them, the park will be a young mountain Saratoga. We found quite a number of visitors here and there is no time during the summer months when no one is there.

On the hillside, some way up from the Grand River, these springs boil up in several places, commingling together a short distance below, unite in one stream, flow over an abrupt place about twelve feet high, into a little round pond below, which unite and make a natural bathing house. The water seems at first scalding hot, and often at first drives the bather out, supposing himself a little scalded, but by putting in first a hand, then the arm and other parts of the body a little at a time, you soon get accustomed to the heat and the fall, and the experience is unusually exhilarating. The invigorating effects are remarkable; no lassitude, no unpleasant feelings as is experienced after an ordinary hot bath elsewhere.

These springs are all different, both as to heat and composition; each has its peculiarities, but no unpleasant sensation is felt even by invalids coming from one into the other. Visitors usually enjoy this healthful luxury twice a day, morning and evening,

during their stay here; making the old grow younger and the younger more joyous. The experience is very exhilarating; after a hard day's work a bath will cause one to forget the burthens of the day, the effect on the body is so restorative. The Indians believe them to have wonderful curative properties, and resort to them not only to cure themselves, but also their sick horses.

The waters resemble and taste very much like those at Sharon Springs; sulphur, soda and iron are deposited about them in quantity; the principal difference being, these are cold, those hot; their medicinal properties, I presume, quite the same. There are many rare and valuable stones found here; petrifactions, jaspers and crystals are scattered all about, but the celebrated "moss-agate patch" lies a dozen miles away over the river where this beautiful crystalization is found all around.

There are many objects in this park that invite the traveler to prolong his stay, none more so than the delicious trout with which the river and streams abound. Antelope are here in large numbers, but the buffalo does not frequent these inner mountain parks.

We prolonged our stay here beyond the time we intended, and gratefully and regretfully we took a long lingering look behind at the Hot Springs as

we go over to the Boulder Pass, and leave the fascinating park, to be remembered as a "joy for ever." Soon we pass over low hills, through valleys, into a succession of woods and open spaces as we gradually ascend the mountains, affording fine views of portions of the park. The road goes zigzag round and over the mountain ranges, sometimes through rough seams in the mountain sides, where fire and water seemed to have been at work in time past, to overturn red, brown and gray rocks; nature everywhere convulsed and broken from her original beds and form, as if here was the great supply warehouse and workshop of creation. A few hours travel over them brought us to the foot-hills along the plains, and we again welcome the new materials in the landscape, for we can look once more far away over the plains to the east, towards home and friends.

CHAPTER XIV.

NORTH PARK.

The North Park is separated from the one we have just left by a high cross range of the main mountains. This park extends up to the northern line of Colorado to within a few miles of the Pacific Railroad. It is very much diversified, internally broken, and more wild and unfrequented than the others. Its soil is colder, as its elevation is higher —less fertility and less vegetation. Every kind of vegetable growth looks as though it was struggling against the frowns of nature. It gives to the wolves, antelopes, bears, deers and smaller wild animals a more secure home than the more frequented parks below. They have but few enemies here, save the red men, and them only in summer; old winter and the bears have undisputed possession during that season.

Through and out of this park flow the head-waters of the North Platte. Its streams are full of trout, while its sage brush give protection to the numerous sage hens, and the hillsides are sprinkled with buffalo and bunch grass for the numerous deer. Those who desire excessive wild life can find it here

unbroken; they will have the original principles in their fullness. If a party of six or more, wishing to spend the summer in the mountains, would rendezvous at the railroad early in June with a traveler's mountain outfit, and begin their journey in the north end of this Park, they would have a summer's romantic enjoyment that would truly be a life-long pleasure. I can not imagine a travel in Europe or this country that would give more satisfaction, more varied knowledge, more wonderful unlike experiences of unalloyed pleasure, than to start from the north part of the North Park and go through the whole line of these incarcerated mountain parks, a distance of more than five hundred miles from San Louis Park, below the Arkansas in New Mexico. This journey could be made leisurely during the summer months, and those who want to have a summer vacation, I am certain would have no cause to regret having made this travel. All of it will be so different from our home experiences, and you will feel so independent and regardless of time, or being fixed up in a conventional hotel, with freedom for thought and action, looseness, and let loose to go unbridled from the outer world, only to return with established health and increased knowledge. But you will lose some little home notions, of which your wife would be thankful, (should you be troubled with

such a necessary evil). You will take no thought of what you should have for dinner, or as to what you were to wear, but take whatever you had and be thankful.

I found in Middle Park Professor Powell, of Illinois, at the head of a scientific exploring expedition. The party were made up of a dozen or more young men, interested in various departments of natural science, giving their time and labor for the enterprise, and for the benefits they expected to derive from it—information and health. They were spending the summer in the parks and mountains adjoining, taking notes with barometer and thermometer, and collecting all the vegetable productions, animals, birds and fish. The field of observation and investigation undertaken by this enterprise is important to the scientific world. They have before them an almost unbounded field of study in physical geography, geology and natural history, as they intend to explore the great western division of Colorado, now comparatively unknown. But few have crossed it! Adventurous miners have penetrated into some of its valleys, but it has no real population, and is unknown as much or more so than any other part of our country. The mountain ranges lean down through it into the great interior bosom of the farther southwest, instead of breaking off, as

they do, abruptly on the eastern side. The rivers Grand, White, Green and the Genison, the head sources of the great Colorado, dash furiously through it, often imprisoned in unapproachable canyons, then through wide and grassy valleys in the south.

We hear of rich mines and basins of broken and ruined mountains, of great conflicts of nature, and many a strong faith in ungotten wealth I have heard expressed as to this section; but it has yet to be explored; it has no fixed history. No doubt it is more broken, less interesting and less important than the middle and eastern divisions. The explorations now being made through this almost unknown land will add largely to our knowledge of what it contains and how it is made up. This, by far the largest and most important industrial interest, has been referred to incidentally, only while rambling over the country, preferring to give you in one article, in a condensed form, my impressions and knowledge obtained while here.

CHAPTER XV.

COLORADO'S MINING RESOURCES.

As a mining country Colorado dates from 1858. In the summer of that year a few prospectors from Kansas and Georgia explored the country up the Arkansas river. When more than two hundred miles from the mountains they discovered in small quantities loose gold on some of the bars of the stream, increasing as they followed up the river. They explored the country around Pike's Peak, and found in some places gold in paying quantities; going northward, along the base of the mountains, finding the precious metal in different places, as far as the mouth of Cherry Creek, where Denver now is. Here they found it in larger quantity and of fine quality. These parties, returning in the fall, gave publicity to their discoveries. Mole hills magnified into gold mountains. The excitement spread rapidly over the country, and the next season a large emigration of Pike's Peakers moved in that direction. Soon other rich developments were made, the excitement increased, and emigration moved rapidly towards the new Eldorado of the West. From that time to the present mining has been prosecuted with

varying success. Like rich mining countries every where, it has been the scene of extravagant hopes, and also the scene of extravagant disappointments. Many have realized all or more than their best hopes, while others, and far the larger number, have been wonderfully disappointed. The country, however, has now lived through her most trying and precarious early existence. When wild speculation ruled supreme, everybody lived, or desired to do so, on their wits, instead of honest labor, to make their "pile," no matter how ruled the day.

> "Wherever God erects a house of prayer
> The devil always holds a chapel there,
> And 'twill be found upon examination,
> The latter has the largest congregation."

The people here are very much mixed. All the States, and every important place in them are represented, and all are engaged in the same absorbing subject of conversation. The seat of empire, in traveling to this country, changed its base from soul to money-getting. Gold before breakfast, at breakfast and after breakfast, together with a good show of blossom rock all day and specimens in the evening. I don't care if I do; I will take mine clear; I will have sugar in mine. Mountain mining life, soon rubs off the veneering of good home influences, and we see of what material men are made.

There is a savage fascination in Rocky Mountain life, in its isolation, lawlessness and danger.

The law of self-preservation is strong in the mountains. "Keep up your heart to-day, for to-morrow you may die," is the motto of a true mountain man. Sundays are as good as other days—no better. "First that which is natural, then that which is spiritual." Miners and mountain men remember the Sabbath day only to keep it jolly; few even would send their cards to church, while they would not go themselves. This results from the migratory and unsettled character of the people away from the restraining and humanizing influence of home association. But she has lived through that uncertain era when "to be or not to be," was an unsolved problem. The loose surface washings of uncertainty have run off with uncertain and unskilled labor, and they are coming down to the "bed rock" of stability—more permanent prosperity.

Central City, located in a narrow defile in the mountains, unshapely and straggling as if built to order and accidentally dropped between the close mountains while being conveyed to its destination, is the center of mining. The most important developments have been made here, rich quartz leads were early discovered, together with some rich gulch mining, which gave the place at an early day a large

population and prosperity, and is now nearly as large as Denver. The first mills to crush quartz and work the ore were erected and put in operation here, and they have continued work the most of the time, giving to their owners a liberal return for their money, some largely so. This place, Empire, and Georgetown in South Clear Creek Valley, seem to be directly on the mineral quartz belt of this part of the mountains; richer and better paying leads have been found on this range than any other place in Colorado. Nearly all the stamp mills on this range are working, and more are being erected; after waiting for more efficient processes for reducing the ores, their owners have put them in operation, somewhat simplified, using more economy in their working. About one hundred and thirty mills are working, producing near forty-five thousand dollars gold per week, at a cost for mining and milling of about two-thirds. The discovery and opening of rich silver mines near Georgetown, imparted new confidence to miners and capitalists; mills are being built, and the place promises to be the most successful mining locality in the country; the head center of silver mining. The ores from the leading mines average from one hundred to eight hundred per ton. Two mills are now working at Georgetown on silver ores; one works the second class ore, that which will

give about two hundred dollars a ton, by stamping, and then amalgamating with quicksilver, at a cost of from sixty to seventy dollars per ton. The other, smelting works, in which to treat the higher grades of ore, at a cost of something over a hundred dollars a ton. This establishment buys most of the ore it reduces from the miners; either process save from seventy to ninety per cent. of the assay value of the ore. These processes, however, are so imperfect that some of the best ore is now sent east for treatment. The Equator mine is one of the prize mines here, and sends its highest grade ores all the way to Newark, N. J., for reduction. The superior yield obtained under the superior and economical management more than pays the freight, which is forty dollars per ton.

Georgetown now has a population of about three thousand, and the best hotel in the country. It is one of the places that every tourist should visit; partly for its silver mines, partly because the road to it up South Clear Creek is through one of the most interesting sections of the mountains, and partly that it is the starting point for the ascension of Gray's Peaks. The traveler can go up to the top of that mountain and back to Georgetown between breakfast and supper; and if he will not take his tour by the Snake and Blue Rivers to the Middle of

South Park, he shonld certainly make this excursion from Georgetown. Central City and its neighborhood are much less interesting to the mere pleasure traveler.

That town, with four or five thousand inhabitants, is crowded into a narrow gulch rather than a valley, torn with floods and dirty with the debris of mills and mines that spread themselves over everything. Scattered about in Boulder district, on the Snake, over on the Upper Arkansas, up among the gulches of the South Park hills, are a few more quartz mills, some in operation and others not; but the principal business of quartz mining is done in the sections I have named, in Gelpin and Clear Creek counties. Mill City, Empire, and Idaho are villages in this section, with their mines and mills, doing a little something, struggling to prove their capacity, but hardly in a single case making money; partly because of the poverty of the ore, but chiefly because it is refractory, and will not yield up its possessions to any known or reasonably cheap process. Time, patience, and cheaper labor will bring good results out of many of these investments, but others will have to go to swell the great number of failures that stand confessed all over this, as all over every other mining country.

The other form of mining, known as gulch mining

or dirt washing, is increasing again, and has employed full three hundred men this season. Fifty to seventy five of these are at work in Clear Creek and Boulder valleys; but the great body of them are scattered through Park, Lake, and Summit counties, on the Snake and other tributaries of the Blue River, on the Upper Platts in South Park, and on the Upper Arkansas and its side valleys. They have averaged twelve dollars a day to a man; but the season for this kind of mining is less than half the year, in some places, because of ice and snow; in most for lack of water. The business is now resumed in a more systematic, intelligent, and economical way; labor is cheaper, miners are satisfied with more moderate returns, and there is hardly any limit to these valleys and banks under the hills and along the rivers, whose sides and gravel hold specks of gold in sufficient quantity to pay for washing over; but I pray it may never be done while I live to come to these mountains and parks, for gold washing leaves a terrible waste behind.

In the granite district of the Upper Arkansas, quartz gold is found in simple combination, "free" as in California, which can be mined and reduced for eight to ten dollars a ton, while it yields from fifty to one hundred dollars; but these are ores from near the surface, and it is yet a problem whether they

will not change on going down in the veins, as in other Colorado mines, and become refractory and impossible of working at a profit, by any known process. There is apparently no limit, in fact, to the growth of the mineral wealth of Colorado, for the business is now taken hold of in the right way, pursued for the most part on strictly business principles, and every year must show improvements in the ways and means of mining and treating the ores. The mountains are just full of ores, holding fifteen to fifty dollars worth of the metals per ton, and the only question as to the amount to be got out, is one of labor and cost, as compared with the profits of other pursuits. Colorado has not been as great a placer mining country as California. Here quartz mills must do the work; here quartz mines are more extensive and richer than those of California, less free gold. The great mountain deposits are almost unattached; whereas, in California free gold is found very extensively. Doubtless, all the detached gold found is derived from the disintegration of quartz leads. The mines of Colorado are very extensive and rich. What is needed most is some cheaper process by which to save the gold, and cheaper labor; together with properly organized companies, honestly and judiciously managed, will receive ample return for the capital invested.

During the several years of Colorado's mining life, she has taken from her mines and shipped east, annually, not less than two millions of gold in any one year, and from that up to eight and ten millions in some years. With such results, under such circumstances, who will presume to estimate the future wealth that is to flow from this country.

The fact that quartz-crushing machinery processes are inadequate for the reduction of the rich ores which are here deposited, and that capital is required to go down in the mines and bring up the hidden treasures of the eternal hills, is now thoroughly established. The time is now at hand, since the completion of the railway, when these hills and mountain valleys will amply reward labor and capital, by acknowledging the cheerful gift of valuable shining bars.

These mountains were found to be too valuable to be longer left for the exclusive occupation of the red man. He must give place to a more useful life—to working intelligent labor. The fullness of time had come with them. The desirable, useful treasures of this region were not to be forever useless, their mysterious deposits forever unlocked. But Greece must destroy Troy, and Rome Carthage, and the powerful nations of the north, Rome, and they too must perish, or be absorbed in their turn; if they

suffer themselves to be left behind on the upward and onward march of a higher and more noble civilization which was soon to dawn upon this world.

CHAPTER XVI.

AGRICULTURAL RESOURCES OF COLORADO.

On my first visit to this country in 1865, after extensive traveling over it, I came to the conclusion that this country was not by nature agricultural, and could not be made so, by the well applied labor of the husbandman. Then Denver stood naked on the plain, not even a lonely tree to shade it from the sun, neither a home garden, and the whole surrounding country one great barren waste, except for pasturage. But the almost wonderful change that had been made between my first and second visits, only a few short years, compelled me to quite change my first impressions. Extensive water ditches had been made from the mountains to the city, affording the best of water for the use of the place, and also for irrigating a large section of land between the city and the mountains, before almost worthless; but now there are large fields of grain ripening to the harvest, together with all the varieties of vegetables, defying in their large growth the before frowns of unreclaimed nature. Now shade trees (so necessary to comfort here,) are growing in their strength and beauty, and gardens and dooryards made green with

grass, and gardens filled with useful and necessary vegetables. As agriculture is the under stratum upon which all other interests rest—the "philosopher's stone," to which all must come for their very existence—I viewed this land's resurrection with unusual interest and pleasure.

Colorado is so located as to form a substantial center in the grand constitutional formation of States; she contains to a large extent the stiffening of the continent. Located as she is in the center of the vast region, bounded by the Mississippi Valley on the east, the Pacific Ocean on the west, British America on the north, and Mexico on the south, the continental mountain ranges stand up here in their majestic proportions; spreading themselves round with a conscious greatness and a wantonness of power. Colorado's gold, silver, lead, zinc, iron and copper, are hid away under their huge shadows. They send forth fountains of the purest water, that forces itself in many directions through the interior of the continent, capable of supplying a wealth of agriculture in the valley and on the plain hardly to be anticipated.

On the bottom lands, along the streams, grain and vegetables may be successfully grown without irrigation, of which the streams offer good facilities for successful, remunerative farming, while the higher

lands must be supplied with water during their summer growth, to insure a crop. Occasionally a good crop of grain, wheat, barley and oats can be harvested along the foot-hills without irrigation; this only when the season is termed wet, and is uncertain. The bottom lands are a rich alluvial deposit, brought down from the mountains, and when properly cultivated will give an astonishing vegetable growth of the grains, except corn (the hot nights that corn loves are not felt here,) and succulent plants, in quantity and quality somewhat unusual for large growth and excellent quality.

The higher lands or plains are composed of a coarse sandy loam, rich in phosphates, washed down from the mountains, and are not used but little as yet, except for pasture.

The agriculture along the base of the mountains north, between the Pacific Railroad at Cheyenne and Denver, is the development almost wholly within two years, and is now nearly one half that of the whole State. South, in the Arkansas and Rio Grande valley, the farming and the population are older, going back to before the gold discoveries. This is the Mexican section, and was formerly a part of New Mexico. Its agriculture is quite extensive, but conducted indifferently and on a rough scale, and it is only the remarkable fertility of the soil that permits

it to be profitable, for the people are indolent, ignorant and degraded Mexicans. The simple and economical habits of these people, together with the productiveness of the soil, make them quite rich. Some of the large farmers are wealthy. Corn grows here, as the nights are warmer. I was told there had been raised here over 300 bushels to the acre. Colorado offers good inducements to the emigrant farmer. The Cache-a-la Paudre is the most northern valley of Colorado, and finds a market at Cheyenne; it has 200,000 acres of tillable lands, of which but comparatively little is yet in use; and its lands can be made very productive; is near a good market; holds out large inducements for farming enterprise; well applied labor is most sure to be rewarded here, perhaps not more so than in many other places.

As a grazing, stock-raising country, Colorado presents unlimited advantages. Grasses are abundant on the mountain sides, in the valleys, all along and over the low ranges as they shade off down to the plains; the animals can roam at will, and a single man can tend a large herd. Nature does the haying, cures the grass standing in July and August, and animals not only live but fatten upon the dried grass in the low valleys during the winter months. Most of the plains are not properly a worthless desert, but are nature's great continental pasture ground.

National and individual wealth will yet be found in the grazing capabilities of these plains, spread out as they are, from five to six hundred miles across, and about fifteen hundred miles in length, from Montana to Mexico. The time is now not far distant when the shepherd will be tending his flocks on the plains, and herds of cattle will take the place of nature's men, and the herds of buffalo which are their support. They will have no further occasion to extend their arms, in praise and gratitude to the Great Spirit in the sun, for the freedom of their existance on this *big clearing.* The Indians are now the only hindrance to the easy and profitable farming business here. When the country can be made safe, as against their depredations, the energetic capitalist will find here a large field for his cattle and sheep, not literally upon a "thousand hills," but scattered over the extended and extensive plains; not only a source of wealth to him, but also to Colorado and the country at large. While the red man has rights, which the white man's government is bound to respect, yet to allow him longer to hold possession of this otherwise profitable region would be a great sacrifice even for a Christian to make.

CHAPTER XVII.

THE CLIMATE OF COLORADO.

Life is fresher to all after being lifted up here from five thousand to twelve thousand feet above sea level. I would say to Americans, come here and make a more familiar acquaintance with America, among the central ranges of the continental mountains, the mountains in perfection and the mountains in ruin; in notorious great liberal parks with their wonderful and varied, bold, attractive beauty; in the wedded majestic rolling hills with majestic plain, under pure and unclothed skies, and in this invigorating atmosphere lies the pleasure ground and health giving home of the nation. The imposing influence on mind and body has no equal elsewhere. An atmosphere so pure that the eye seems to take in all space, and so dry and exhilarating that life dances at every pore. You go about as on easy wings, light-hearted, having partaken freely at the fountain of pure health, spread over these hills and plains by a liberal hand. Fresh meat cut in strips in summer, and whole quarters in winter, and hung up, will cure without salting, so that it may be taken to any part of the globe without injury. I saw some

persons, supposed to be hopelessly consumptive, able only to travel in wagons, lying upon feather beds, who, after crossing the plains and living in the mountains a while, recovered, so that they enjoyed a comfortable degree of health for years after. High regions and invigorating air, away from salt water, seems to be precisely what is needed.

The climate varies with the altitude, and is salubrious and invigorating at any hight; if it were not so, the gold hunter would have been more sadly disappointed, considering the labor and exposure to which he was subjected. The settler here seldom suffers in acclimation, he will generally become rejuvenated—endowed with a new stock of constitutional vigor. Lung diseases, which in low country climates are so common and often so fatal, are almost surely cured in this high and arid atmosphere. I was told that in some sections, it was so healthy that a man had to be killed to start a burying-ground. These mountain ranges send forth great fountains of health in exhilarating air, in nature's great fountains of wonderful beauty. They may indeed hold out inducements for all to come to them for wealth, for invigorating health, for relief and restoration. They may with propriety be called the Mother Mountains.

The climate of that portion lying east of the mountains is delightful and healthy. The frosts come

early in the autumn and continue far into spring, but they are not severe. On the plains the snows are never sufficient to prevent cattle from thriving and fattening on the nutritious grass, dried up and cured, standing for fall and winter use.

CHAPTER XVIII.

NEW MEXICO GENERALLY.

This territory, containing about 122,000 square miles, three times larger than New England, was a part of Old Mexico previous to 1846; hence its name. At the close of the Mexican war, it came legally into the possession of our government. In 1848, at the settlement of the war, the Mexican title to the land was extinguished, and it came fully into the possession of the United States. Since then settlements have been quite large as to agriculture, stock-raising and mining. These interests are now growing large, but being so far inland, away from all the markets with the outer world, are restricted wholly to home demand, as it would not pay them to team their surplus eight hundred to a thousand miles away to a market; but when the Southern Pacific Railway shall be completed across this country, opening out to the farming interest a ready and profitable market, then it will present unusual advantages for settlement.

The great Overland Stage Route, established by John Butterfield and others, across the continent, ran through this entire territory and fixed a line of

civilization, which has branched off to some extent through the country, and kept in various ways towards settlement. The seed thus planted is growing up into the harvest.

The general surface of the country is uneven, badly broken. The stupendous Rocky Mountain ranges tower up in all their continental magnificence, cross the territory from north to south, together with intersecting cross ranges, making some very interesting parks; the most noted of which is the San Louis, in the north part, rich in varied beauty and resources, and many remarkable features not characteristic of the other great parks further north. The mountain ranges make also many large and fertile valleys. The most important of these is the Rio Grande, which is the principal stream of the territory, and is navigable in places for a distance of 1,800 miles; starting in a deep canyon, plowed out of the granite rock on the side of "Mount Lincoln," in the eternal snows of the central range, and crossing the whole territory of New Mexico, from north to south.

You will recollect that it was along this river where the Mexican war commenced with the United States, by conflicts between the Mexican army, under the command of General Ampudia and the army under General Taylor.

This valley is from one to fifteen miles wide, is capable of supporting a population large enough for a small State. The bottom lands are remarkably productive; also the low sloping foot-hills, with a light gravelly soil, when irrigated and properly tilled, give a growth of almost any crop put upon them, that will fill a mountain valley home with enough and to spare, with comparatively little labor, for both the soil and climate unite in a remarkable degree to assist those who turn its rich furrows to the sun, and put in the seed. As the season for vegetation is very long, often two crops are grown in one year from the same land. Vegetation through all this country makes a much more rapid growth than it does in the more northern States. As there is but little rain here during the year, scarcely no winter in the low valleys, and the almost constant sunshine, with a proper system of judicious irrigation, these valleys will produce, and can be depended upon like a hot-bed.

But eleven years ago, this large territoy was acquired by the United States. At that time the Ranchers cultivated the land on original principles, such as, I suppose, was used when "Adam delved with a hoe, remarkable only for its antedeluvian existence; a wooden plow made of a forked tree, such as was used on the plains of Syria, and in Persia,

such as may now be seen in the Agricultural Hall at Albany, together with a wooden tooth drag, completed the implements of the most wealthy farmers. His farming tools showed no improvement upon those of his Astec forefathers. Instead of our threshing machines, some of them were treading out their wheat with horses and oxen, as did the Israelites three thousand years ago; others were pounding it out with long clumsy poles upon the ground.

At that time the country was occupied wholly by the low greaser Mexicans, who were jammed so full of the law of gravitation they could never get above the ground, a composition of negro and Mexican, and a few quarter civilized Indians more, that were as wild and ugly as some of their hunting grounds.

New Mexican settlements have a remarkably old look. The adobe buildings, with small narrow windows, low doors and flat roofs, suggest

> "The events
> Of old and wonderous times,
> Which dim tradition interruptedly teaches."

About a hundred miles south-east of Santa Fe are saline lakes, or salt marshes, supplying the whole territory with salt; near them are found the ruins of a city, the remains of an aqueduct several miles long, walls of churches, castilian coats of arms, probably a silver mining town destroyed two centuries

ago, when the natives drove out or killed all the inhabitants.

In the south-west corner, on the San Juan River, Colorado (then in Mexico) is found some remarkable ruins. One of these deserted human bee-hives was five hundred feet long, enclosed with a wall a foot thick, and thirty feet high, of solid stone, and six stories high.

Nearly three hundred years ago, Spanish Missionaries found in New Mexico Indians who raised cotton, manufactured cloth, and lived in towns with streets, having dwellings like the present Pueblos Indians. The founders of these towns were of that remarkable order, whose unflagging energy and perfect organization achieved such conquests over all that country. Remains of old Jesuit Missions are scattered through California, Arizona, New Mexico, Old Mexico, and Central America.

This vast region of country was converted to the old Roman faith, by life-long labor of this society, and not by the over-enthusiasm of Cortez and his robbers, who hurled the native idols to the ground, to replace them with the cross. The Santa Fe Cathedral is a high adobe edifice with effigies of the Saviour and the Virgin, with life-size paintings of these scenes hanging on the walls.

In Taos there is a building of Indian origin, which

tradition says was built three centuries ago. The streets, like those of Santa Fe and other places, are crooked and narrow, and like most towns of the kind, are usually filled with "Mexican" carriages. The donkey, about as large as a yearling colt, serves for mule, horse, ox, cart and barouche. He staggers like a runaway hay stack, under immense loads of grass and corn-stalks. He brings from the mountains immense piles of wood for fuel. He transports baggage and provisions of all kinds, generally over the mountains and plains of the whole country; indeed he is the commercial thoroughfare every where. One man will pack a number of them, called a packing train, and transport, often heavy articles, hundreds of miles; but very few wheeled vehicles in the country, those few are owned by Americans. The Mexican has, from the first, carted all his crops from the field to his cabin on the backs of these little animals; few of them in their own country ever had a harness upon them. These small animals will take a load nearly as heavy as themselves over long mountain ranges, following each other, in Indian file, through the narrow trail, over most difficult and dangerous places, apparently with little fatigue. Their endurance is quite remarkable. The interior country is so destitute of wagon roads, that there is no other way by which trade can be carried on between the settlements.

Here, at Taos, the celebrated mountaineer and guide settled to crown a youth of labor, with an age of ease, at the age of fifty. His wife, an intelligent Spanish woman, with a family about him, he retired like many other great men, on his farm, pleasantly located on Taos River, a chrystal mountain stream, where his numerous horses, mules and cattle would serve him thankfully for giving them so good a home. He is a Kentuckian by birth, of most excellent natural abilities, but of very limited education; reading with difficulty, and writing very little beyond his own name. However, he speaks several languages fluently; English, French, Spanish and several Indian tongues, acquired orally. His long life of many years, away from civilization, as hunter, trapper, and guide, had not deprived him of the natural instincts of a gentleman; honorable and simple-hearted, beloved by Americans, Mexicans and Indians. When he guided General Fremont, on his long and perilous expeditions, he held a lieutenant's commission in our army. He was made a Brigadier General of Volunteers during the rebellion, and after the war took command of a fort in New Mexico. But our people having gone there of late for the purpose of settlement, to become agriculturists, miners and traders, have introduced among these benighted people the implements of a better civilization, a higher standard of farm life.

The middle and southern portion of the territory contain large quantities of exceedingly rich land, adapted to the cultivation of cotton, sugar, tobacco, corn, sweet potatoes, peaches, fruit and vegetables, The soil and climate is such as to grow in perfection all that can be grown in the middle States; together with many of the tropical fruits. The north and the south sun, to meet each other here in friendly embrace, neither of them appear to be strayed or stolen from their native homes.

As soon as the country can be made safe to the settler and his property, as against the wandering tribes of Indians, few places offer more inducements for the emigrant than this, as to fertility of the soil and climate. Here he may select almost any of the different branches of farming, and if he does his part (not very well) he is sure to succeed beyond his first expectations. The red men here, who have a light sprinkling of higher life, live in communities, and cultivate the soil, raise remarkably good crops for their very limited knowledge, and equally limited means to do it with, or rather their squaws do it for them.

These original inhabitants have been very hostile to settlers and miners, making life and property unsafe; driving from the country both Americans and Mexicans. But since it changed owners, military

posts have been established in different parts of the territory, restraining the red men, and giving better security to those who are there, and learning the savages by some hard experiences, that they must conform to the new dispensation, or go to the hunting grounds of his mysterious medicine. The principal damage they now do, is to run off stock, which can hardly be guarded sufficiently to prevent such thefts; however, there is but very little of it now, as compared with a few years ago, and soon, no doubt life and property will be safe in any part of the territory.

The mining interests of New Mexico can hardly be overestimated. Various parts of the country have been prospected for the precious metals with good results. Rich placer diggings have been found in many places along the rivers and mountain streams, as yet imperfectly worked.

Near the Placer Mountains the whole soil seems to be mixed with the precious metal, and it is believed by some, who have carefully examined this district, that if science and capital was brought to its development, it would be one of the richest gold producing regions in the world.

Gold in quartz veins has been found in some of all the mountain ranges of the territory, in quantity and richness that will give large returns when pro-

perly worked. Some of the mines have been indifferently worked at times for over two hundred years by the Spaniards and Mexicans. The Santa Rita Mines are known to have been worked centuries ago. The precious metals, gold, silver, copper, iron and zinc, are known to be very liberally distributed in large quantities over the country. Wherever they have been developed to any extent they have given evidence of richness and permanence, and the farther they have been sunken upon the more profitable they have been.

In the mountains surrounding the old trading town of Santa Fe, where the miners were somewhat protected from the Indians, they have taken out large quantities of silver. There can be no doubt but that New Mexico will become one of the very best mining sections of this country. The climate favors work remarkably. The whole year is much more favorable to these interests here than farther north.

The old people of Mexican towns look older than in any other country. There is a local proverb that this region is so healthy that the oldest inhabitants never die; but lean, attenuated and wrinkled, like Egyptian mummies, dry up ultimately and are blown away.

The climate varies with the altitude, and is very

healthful at any hight. Santa Fe, the capital and business metropolis, is situated on a plain, or rather in a great mountain bowl roof above the level of the sea, and has a delightful summer climate, and is the highest town in the United States of any importance, while the mountains near, whose peaks are always covered with snow, rise to a hight of 1,200 feet. In the middle and southern portions of the territory the whole year is agreeable; the change of seasons are not any more than is agreeable and congenial to health and comfort. The sky is generally clear and the atmosphere dry. Pulmonary complaints are not known. The diseases are few; none but those occasionally contracted by lying too much out on the open ground in winter.

Stock-raising here, as in Northern Texas, is the most profitable source of income, the whole country being adapted to this branch of husbandry. Very large flocks of sheep are raised, and also large numbers of mules, to supply the demand North for them. Large portions of the high plains, low hills and valleys are covered with nutritious grasses, sufficient for the pasturage of millions of animals the whole year, as they require no more care in winter than in summer.

CHAPTER XIX.

THE BUFFALOES.

The buffaloes have been driven from the more central portions of the country north down here on the plains and in the valleys, where they have now congregated, as a last resort, more largely than in any other part of the country. Here they are at home; Nature's munificence supplies all their wants. Here life to them is a round of pleasure, as of old, while they grow large and fat for their butchers. They have here an immense country lying between the Rio Grande and Texas, and traversed by large mountains, intersected by cross ranges, little inhabited, affording them better protection than any other place. Here they had their early buffalohood. The first authentic account we have of them is from this part of the country. Distant as it is from the sea, the adventurous Spaniards penetrated it at an early day.

Coronado speaks of having traversed the country north of the Gila, occupied by the Puebla Indians, and pushed his way eastward beyond the Rio Grande to the country of the buffalo, and he is the first who speaks of that animal, which he calls "a

new kind of ox," wild and fierce, with which they supplied themselves with meat, and killed four score the first day. Here the destructive slaughter began, which has been followed up, age after age, till now they are congregated in a few somewhat out of the way places to await their sure destruction.

Occasionally, when passing over a mountain range, we would come unexpectedly upon a herd of these noble animals feeding in the valley, generally along a meandering mountain stream, where buffalo life seemed replete with happiness; some grazing, some lying down and sleeping, others having their buffalo plays, and still others rambling among the low, grassy foot-hills—altogether forming a landscape, when once seen, never to be forgotten. Here, alone in their glory, free from danger, (probably in their own estimation,) while a party of men are on the ridge, stripping themselves and their horses of all unnecessary appendages which might hinder their running; hats and coats are taken off, ammunition pouches laid down, prepared cartridges placed in a ready pocket, and guns loaded, the party mount their restless steeds and they start for the onset. The horses, accustomed to the business, appear to enter into the enthusiasm with as much spirit as the riders themselves, champing their bits, ears erect, eyes dancing in their heads, and fixed on the game in the

valley. When all are ready, the party move carefully and slowly down a long ravine to within a short distance of the unsuspecting herd before being discovered. This brought the party near their game, and the start was close. All seemed to fly over the extended bottom land in a cloud of dust, which was raised by their many hoofs. The party dashed along through the thundering, concentrated mass, as they swept away from their view. I stretched my eyes in the direction where they had so suddenly disappeared, and nothing could be seen but the cloud of dust they had left behind them. The party did not follow the herd over a mile when they had killed a half dozen fat young cows, shot through the heart at full speed. This was all they could pack to the miner's camp, and was more than a supply for the time. They are seldom killed now faster than the meat is needed for present use, either by white men or Indians. Their scarcity and great utility in this country is beginning to be appreciated.

"But, Monsieur Labordett, you promised to tell me about the buffalo hunt at 'Missouri Lake.'"

"That isn't much to tell. It war putty much like other buffalo hunts. Thar war a lot of us trappers happened to be at Nez Perce and Flathead village in the fall, when they war going to kill winter meat, and as thur hunt lay in the direction we

war going, we joined in. The old Nez Perce chief, Kow-e-so-te, had command of the village, and we trappers had to obey him, too. We started off slow; nobody war allowed to go ahead of camp.

"In this manner we caused the buffalo to move on before us, but not to be alarmed. We war eight or ten days traveling from the Beaverhead to Missouri Lake, and by the time we got thar the whole plain around the lake war covered with buffalo, and it war a splendid sight!

"In the morning the old chief harranged the men of his village, and ordered us all to get ready for the surround. About nine o'clock every man war mounted, and we began to move.

"That war a sight to make a man's blood warm! A thousand men, all trained hunters, on horseback, carrying their guns, and, with their horses, painted in the highest of Indian fashion. We advanced until within about half a mile of the herd; then the chief ordered us to deploy to the right and left until the wings of the column extended a long way, and advanced again.

"By this time the buffalo war all moving, and we had come within a hundred yards of them. Kow-e-so-te then gave us the word and away we went pell-mell. Heaven, what a charge! What a rushing and roaring! men shooting, buffalo bellowing and trampling until the earth shook under them.

"It war the work of an hour to slay two thousand, or perhaps three thousand animals. When the work war over we took a survey of the field. Here and there and everywhere layed the slain buffalo. Occasionally a horse with a broken leg war seen, or a man with a broken arm, or maybe he had fared worse and had a broken head.

"Now came out the women of the village to help us butcher and pack up the meat. It war a big job, but we were not long about it. By night the camp war full of meat and everybody merry. Bridger's camp, which war passing that way, traded with the village for fifteen hundred buffalo tongues, the tongues being reckoned a choice part of the animal. And that is the way we helped the Nez Perces hunt buffalo."

"But when you were hunting for your own subsistence in camp you sometimes went out in small parties."

"Oh! yes, it war the same thing on a smaller scale. One time Kit Carson and myself and a little Frenchman named Marteau, went to run buffalo on Powder River. When we come in sight of the band it war agreed that Kit and the Frenchman should do the running and I should stay with the pack mules. The weather war very cold, and I did not like my part of the duty much.

"The Frenchman's horse couldn't run, so I lent him mine. Kit rode his own; not a good buffalo horse either. In running, my horse fell with the Frenchman and nearly killed him. Kit, who couldn't make his horse catch, jumped off and caught mine and tried it again. This time he came up with the band and killed four fat cows.

"When I came up with the pack mules I asked Kit how he came by my horse. He explained, and wanted to know if I had seen anything of Marteau; said my horse had fallen with him, and, he thought, killed him. 'You go over the other side of yon hill and see,' said Kit.

"What'll I do with him if he is dead," said I.

"Can't you pack him to camp."

"Pack h—l, said I. I should rather pack a load of meat."

"Waal," said Kit, "I'll butcher if you'll go over and see, anyhow."

"So I went over and found the dead man leaning his head on his hand and groaning, for he war pretty bad hurt. I got him on his horse, though, after a while, and took him back where Kit war at work.

"We soon finished the butchering job and started back to camp with our wounded Frenchman and three loads of fat meat."

"You were not very compassionate towards each other in the mountains."

"That war not our business. We had no time for such things. Besides, live men war what we wanted; dead ones war of no account."

It would often seem to me that live men were also of little account, by the wanton recklessness with which it was often taken. To the unsophisticated, the savage way by which real or imaginary injuries were redressed often by these veterans of the mountains, would freeze up any warm, sympathetic heart. These men get so in the habit of killing that it seems but little to them whether a man or a buffalo is killed. It is the object of mountain men to keep their hearts "big," and not to remember the miserable fate of some of their comrades.

While meditating one day upon the certain fate that awaits the buffaloes, I strolled unconsciously away and wrote thus:

"It is generally supposed and familiarly said that a man falls into a reverie; but I seated myself in a shade a few minutes and resolved to force myself into one, and for this purpose I laid open a small pocket map of North America, and excluding my thoughts from every other object in the world, I soon succeeded in producing the desired illusion. This little chart over which I bent was seen in all its parts,

BUFFALO HUNT.

as nothing but the green and vivid reality. I was lifted up as upon an imaginary pair of wings, which easily raised and held me floating in the air, from whence I could behold beneath me the Pacific and Atlantic Oceans, the great cities of the East, and the mighty rivers. I could see the blue chain of the great lakes at the North, the Rocky Mountains, and beneath them, and near their base, the vast and almost boundless plains of grass, which were speckled with the grazing bands of buffaloes."

"The world turned gently round and I examined its surface. Continent after continent passed under my eye, and yet, amidst them all, I saw not the vivid green that is spread like a carpet over the Western wilds of my own country. I saw not elsewhere in the world the myriad herds of buffaloes—my eyes scaned in vain, for they were not—and when I turned again to the wilds of my native land, I beheld them all in motion! For the distance of several hundred miles from north to south they were wheeling about in vast columns and herds. Some were scattered and ran with furious wildness; others lay dead; others were pawing the earth for a hiding place; some were sinking down and dying, gushing out their life in deep-drawn sighs; and others were contending in furious battle for the life they possessed and the ground they stood upon. They had long since as

sembled from the thickets and the secret haunts of the deep forest into the treeless and boundless plains, as the place for their safety. I could see in an hundred places, amid the wheeling bands, and on their skirts and flanks, the leaping wild horse darting among them. I saw not the arrows, nor heard the twang of the sinew-bows that sent them, but I saw their victims fall; on other steeds that rushed along their sides, I saw the glistening lances which seemed to lay across them! Their blades were blazing in the sun, till dipped in blood, and then I lost them. In other parts (and there were many) the vivid flash of fire-arms was seen; their victims fell, too, and over their dead bodies hung, suspended in air, little clouds of whitened smoke, from under which the flying horsemen had darted forward to mingle again with and deal death to the trampling throng."

"So strange were men mixed (both white and red) with the countless herds that wheeled and eddied about, that all below seemed one vast extended field of battle. Whole armies, in some places, seemed to blacken the earth's surface; in other places regiments, battalions, wings, platoons, rank and file and "Indian file," all were in motion, and death and destruction seemed to be the watchword amongst them. In their turmoil they sent up

great clouds of dust, and with them came the mingled din of groans and trampling hoofs, that seemed like the rumbling of a dreadful cataract or the roaring of distant thunder. Alternate pity and admiration harrowed up in my bosom, and in my brain many a hidden thought, and amongst them a few of the beautiful notes that were once sung and exactly in point. *Quadrupedante putrum sonitu quatit ungula campum.* Even such was the din of these quadrupeds of these vast plains. And from the craggy cliffs of the Rocky Mountains were seen descending into the valley the myriad Tartars who had not horses to ride, but before their well-drawn bows the fattest of the herd were falling. Hundreds and thousands were strewn upon the plains; they were flayed, and their reddened carcasses left, and about them bands of wolves and dogs and buzzards were seen devouring them. Contiguous, and in sight, were the distant and feeble smoke of wigwams and villages, where the skins were dragged and dressed for white men's luxury! where they were all sold for whisky, and the poor Indians laid drunk and were crying. I cast my eyes into the towns and cities of the East, and there I beheld buffalo robes hanging at almost every door for traffic; and I saw also the curling smoke of a thousand stills, and I said, Oh! insatiable man, is thy avarice such? wouldst thou

tear the skin from the back of the last animal of this noble race, and rob thy fellow man of his meat, and for it give him poison ?"

It is rather a melancholy contemplation for one who has traveled in these realms, seen, and can appreciate, these very useful, noble animals in all their pride and glory, once spread over the country from the Atlantic Ocean to the Rocky Mountains, now congregated in the only place left on the continent for them, and there rapidly wasting away; we must come to the irresistible conclusion that its species is soon to be extinguished. I imagined that if it were possible for some protecting power of government to preserve in their pristine beauty and wildness, in a magnificent park—one of those of which we have spoken—where the world could see, for ages to come, the buffalo and his joint tenant, the Indian, in his wild attire, on his native pony, with bow and lance, galloping amid a herd of elk, buffalo and antelope, what beautiful and interesting specimens of the native animals they would be for America to preserve in one of the great national parks here in the mountains, where her refined citizens, and the world in future ages, might view with delight both man and animal, in all the wildness of their native beauty.

It is not a pleasant thought to anticipate the pe

riod, which is not far distant, when the last of the buffalo shall fall before the improvident rapacity of both white and red men, leaving much of their new feeding grounds unstocked and unpeopled for future ages. While the buffalo is heavy, full of clumsiness and awkward, just the antipodes of the incarnate ease and grace of the swift moving antelope, they present a pleasing contrast; especially so when seen near each other.

Hunters sometimes stick their ramrods in the ground, tie a handkerchief on it and then secrete themselves. The unsuspecting antelope, with a curiosity as fatal as mother Eve, circles nearer and nearer until he falls by the well directed bullet. No animal has a more remarkable curiosity than this; when first seen they will run rapidly off and then come back to make the acquaintance of those by whom they were frightened. The wolves are said to chase them in a circle, thus enabling a fresh pursuer to take the place of the weary one every time they pass the starting point; fleetness falls a victim to cunning, and the antelope soon furnishes a meal for the hungry pack.

CHAPTER XX.

ARIZONA—BOUNDARIES — EARLY HISTORY — PHYSICAL ASPECTS—AGRICULTURAL AND MINERAL RESOURCES.

This is among the oldest settled countries on the Pacific slope. Less is known of Arizona and the neighboring State of Sonora than any other portion of our South-Western Territories. It is bounded on the north by Nevada and Utah, on the east by New Mexico, and on the west by the Colorado River, which separates it from California, and embraces an area of nearly 121,000 square miles. Arizona, to be properly appreciated, must be considered as a whole; known as the "Gasden Purchase," or as the Colorado River District, gives but a very limited idea of its territory; which is necessary to a proper understanding of its varied and extensive capabilities, and to a proper appreciation of its prospects.

The early history of this territory is that of Old Mexico; settlements were made along the Gila River and in some other places by the Jesuit Missionaries from the lower provinces in 1687. Many towns were established and settled quite rapidly. The reports of the rich mineral wealth of the new country, caused for the time a large emigration. In 1710 re-

newed discoveries were made and consequent increase of population. Then began a more general conquest of the country, both by the Jesuits and the Spanish Government. They continued to occupy the territory up to 1757, when their enslavement of the natives became so oppressive and cruel, that the Apache Indians, together with some of their more northern wilder neighbors, rebelled against their cruel task-masters, and killed and drove from the country all the other inhabitants. From that time till it was purchased by the United States, settlement was very limited on account of these unfriendly natives, as life and property had no protection in the country. Civilization of course disappeared, and at the time of the purchase the territory contained scarcely any white population.

The remains of that civilization may be seen in deserted ranches and adobe houses in towns and villages, in a system of agriculture and mining. We now find about the country the early footsteps of that higher civilization which is now to spread itself over that country to stay, and bring to life and usefulness the locked up treasures of the mountains, and make the valleys bring forth abundantly for the use of all.

The territory is quite accessible from Los Angelos, on the Pacific coast, across California, and is re-

markably well timbered and watered. The upper branches of the Colorado penetrate the whole northern portion, while the Gila River with its several large branches extends through the southern part, giving unusual large advantages for cultivating the soil and stock-raising.

The settlements here are largely Mexican; having been mostly made since the United States acquired the territory, and that the lands are owned under American title many of them are becoming thoroughly Americanized, exhibit better traits of character, more industrious, better behaved and show strong symptoms of constitutional and mental improvement. When these people, inferior physically and mentally, come in contact and live with our people, they readily adapt themselves to the improved conditions of life with which they find themselves surrounded.

Quite a large emigration from the Pacific coast, mostly from California, is centering here mostly for mining purposes; but many intend a permanent settlement, believing the country as a whole combined as much or more real advantages than any other, having the soil and climate of the southern portion of California. When it shall have railroad advantages with San Francisco and the East, and become entirely safe as against Indian depredations, those coming here as tillers of the soil, miners or

traders, will never regret the choice they have made. It is supposed, and I believe correctly, that the Rio Grande valley offers settlement to 50,000 people, within the Arizona boundaries. West of this the country is broken, a succession of table lands moderately ascending for nearly a hundred miles to the Sierra Madre Mountains; from there gently descending until they reach the Gulf of California—about 500 miles.

The country south of the Gila River has two well defined ranges of mountains, known as the Chiraca-heei and Santa Rita. They are the prolongation of those ranges which have yielded silver so largely, northward in Nevada and extend southward in Sonora, Chihuahua and Durang, which have given millions of silver for centuries past to astonish the world by their massive returns of the precious ores. Arizona has now been prospected and developed sufficiently to prove, beyond a peradventure, that her mines of gold, silver and copper are extensive, eligibly located, well defined, and as far as worked, exceedingly rich. They are mostly found in regular formation of trap and porphyritic rocks, and undisturbed by volcanic action. The ores are more easily worked than in some other places, and can be more inexpensively reduced. Silver is never found detached like gold, but is found only in the original

quartz-lead formation. Experienced miners and skilled metalurgists, who had examined portions of the mining region, were confident that mines would be found here richer and more extensive than they have been found in Nevada, with better facilities for working them.

Some very good placer mining was discovered in 1863, and some considerable free gold washed out. Enough has already been mined, and different sections prospected, to make it certain that this branch of mining will be no small business of the country.

Irrigation, as in the country north and east, is necessary to agriculture. The bottom lands are fertile and will compare favorably with the best anywhere. The season for cultivation is long; indeed, it is nearly the whole year. Fruits blossom in February and March, and nature generally is in her summer costume. Cotton, wheat, corn, barley, tobacco, grapes, peaches, and all the variety of vegetables grow and yield largely. There is a native Mexican grape here, grown largely in the Rio Grande valley, which has few superiors anywhere, and is introduced largely in California both for home use and for wine.

R. C. McCormick, Secretary of the Territory, after traveling over the country extensively, speaks of its agricultural capabilities in the following language :

"While it has much barren and desolate country, I undertake to say that no mineral region belonging to the United States—not excepting California—has, in proportion to its extent, more arable, pasture, and timber lands. Those who have asserted to the contrary have been either superficial and limited in their observations, or wilfully inaccurate in their statements."

All that portion of Arizona lying above the Gila River has a delightful climate. (Below the heat is oppressive in summer.) Never excessively hot, with moderately cool summer nights, it offers more inducements to those who desire more genial skies than those of the North and East. Snow never lays in winter and seldom falls. Frost is unusual, though the nights are sometimes quite cold, but not freezing. The climate is nearly that of the lower portion of California. Being farther inland, there is less humidity in the air passing over it; but the breezes, sweeping inland from the Pacific coast, cools the summer heat and makes it warmer in winter, imparting to it largely the climate of the former, of which you have heard so much, if never enjoyed.

That my readers may have a fuller understanding of the relative advantages of different sections of the territory, I have thought proper to speak of it,

as the Territorial Legislature organized and divided it into four counties, naming them after four leading tribes of Indians residing within its boundaries. As the Secretary, of whom I have spoken, has given a more accurate description than I could hope to make, I give it in his own language:

PIMA COUNTY.

This county is bounded on the east by the line of the Territory of New Mexico; on the north by the middle of the main channel of the Gila River; on the west by the line of 113 deg. 20 min. west longitude, and on the south by the Sonora line. The seat of justice is established at Tucson.

Pima County embraces all of "the Gadsden Purchase" within the territorial lines, excepting the small portion west of 113 deg. 20 min. west longitude, which is in Yuma County, and is the best known portion of Arizona. This comes from its early settlement, the development of its mines, and the extensive travel through its length during the running of the Southern or Butterfield Overland Mail. Its silver mines are among the richest upon the continent. Some of them have been worked for centuries, and if they have not constantly yielded a large return, it has been more from a lack of prudent management or the incursions of hostile Indians,

than from any defect in the quality or quantity of the ore, or in the facilities for extracting and working the same. The ores are chiefly argentiferous galena, and are best adapted to smelting. The copper mines of Pima County are surprisingly rich, yielding in some instances as high as ninety per cent. of pure copper. The ores are chiefly red oxydes and gray sulphurets.

Wood and water, if not immediately at hand, may usually be had at a convenient distance. The Santa Rita Mountains have fine pine forests, and between Tubac and San Xavier is a timber district some miles in width, extending from the Santa Cruz River to the base of the mountains. The timber is mesquit, and of a large size; for railroads and mining purposes it is well adapted, and must be of incalculable value; for building purposes it is too hard and crooked. The cotton wood is found on the margin of all streams; it is of rapid growth, and well adapted for building. The adobe, or sunburnt brick, is, however, the favorite building material. It is easily and inexpensively made, and, laid in thick walls, furnishes an enduring and comfortable house, better suited to the climate than any other.

The agricultural and pasture lands of Pima County are very extensive. The valleys of the Gila, the Santa Cruz, the San Pedro, and other streams, are

extensive, and equal in fertility to any agricultural districts of the United States. The San Pedro valley, over one hundred miles in length, is, perhaps, the best farming district south of the Gila River. The Sonsita valley, which opens into the Santa Cruz near Calabaras, is some fifty miles long. In each of these valleys there is an abundance of water for irrigation, and both whites and Indians have raised large crops with little labor.

The table lands of Pima County are covered with a short and luxurious grass, upon which immense herds of cattle have been and still may be raised; and the grazing districts include many of the mountain ravines as well as the lesser hills, where gramura grass is found in abundance, and which is greedily eaten by horses, mules, sheep, and horned cattle. This grass is very nutritious, and even when dry and parched by the summer heat, is eagerly sought after by the animals.

Tucson, the principal settlement of Pima County, is in the Santa Cruz valley. It was a prominent station upon the Butterfield route. Of late years it has been much improved, and the recent opening of several rich mines in close proximity to the town, will give it increased business and importance. Its population is largely Spanish, and the same may be said of all the settlements in this county. Other

towns in the mining districts south of Tucton and Tubac, and on the Gila River, are becoming of consequence as the agricultural and mineral development of the country progresses. Their growth is somewhat retarded, as is the prosperity of the whole country, for the want of an American port upon the Gulf of California, by which route goods and machinery might be speedily and economically received. The great oversight of the United States in the failure to acquire such a port when it might have been had without difficulty or expense, is keenly and constantly deplored; and it is the hope of every one living in or interested in Southern Arizona, that our government will, by negotiation (if coming events do not afford other means,) soon secure either the port of Libertad or Guaymas, or both. Indeed, the geographical relations of the State of Sonora to Arizona, and our access to the Pacific, are such that its acquisition seems little less than a matter of duty.

From Libertad, it is but one hundred and fifty miles to the mining regions of the lower portions of Pima County; and from Guaymas, the distance is about three hundred miles; both roads are easy, and supplied with grass and water. The transportation of mining supplies from Los Angelos or Fort Yuma, as is now necessary in order to escape the heavy duties imposed in Sonora, although entirely practicable,

involves much more overland travel, and consequently increased delay and expense.

YUMA COUNTY.

This county is bounded on the east by the line of 113 deg. 20 min. west longitude, on the north by the middle of the main stream of the Santa Maria, to its junction with Williams' Fork; thence by the middle of the main channel of said stream to the junction of the Colorado River; on the west by the main channel of the Colorado, and on the south by the Sonora line.

The seat of justice is established at La Paz. Of the two counties upon the Colorado, (Yuma and Mojave,) this has at present the largest population. Until 1862, it was comparatively unknown for any distance above Fort Yuma; indeed, the Colorado had barely been explored.

The discovery in 1858, of gold on the Gila River, about 20 miles from its junction with the Colorado, attracted considerable attention, and prompted the laying out Gila City; but it was not until 1862 that emigration started up the Colorado. At that date the finding of rich placers at Chimney Peak, 20 miles above Fort Yuma, and at various points from 8 to 20 miles back of the site of the present town of La Paz, 110 miles from the fort, drew a large number of mi-

ners and prospecters from California and Sonora. The subsequent discovery of multitudinous silver and copper mines upon and adjacent to the river, in what are now known as the Yuma, Castle Dome, Silver, Eureka, Weaver, Chimehuiva, and La Paz mining districts; and the opening in 1863 of the interior country (Central Arizona,) have given it an activity and importance second to that of no portion of the Territory. As yet its settlements are all upon the river. La Paz, the chief of these, is a busy commercial town of adobe buildings, with a population about equally American and Spanish. It has some stores that would not do discredit to San Francisco, and enjoys a large trade, extending up and down the river and to Central Arizona.

Castle Dome, Mineral City, and Olive City, all upon the Colorado, between Fort Yama and La Paz, are mining towns yet small, but destined to become of consequence as the depots of mining districts of great richness, which cannot long remain undeveloped.

The silver ores of Yuma County are mostly argentiferous galena. Those of Castle Dome district, 40 miles above Fort Yuma, according to Prof. Blake, are found in a vein stone of fluor spar.

The same authority reports the copper ores as nearly all containing silver and gold; some of which give forty per cent. of copper yield at the rate of sixty ounces of silver to the ton.

A quicksilver mine discovered near La Paz is attracting considerable attention in San Francisco.

The face of Yuma County is for the most part mountainous and barren, although the Colorado bottom, and occasional valleys, are fertile, and the Indians have fine crops. Wood sufficient for fuel and for present mining operations is found in the mountain ravines and along the streams.

A main highway from the Colorado to Central Arizona starts from La Paz, and is one of the smoothest natural roads I have ever seen. Its course to the Hassayampa River (110 miles,) is almost an air-line, and in the whole distance there is nothing to obstruct the passage of the frailest vehicle or of the heaviest train. It lacks a sufficiency of water and of grass for animals, and a company chartered by the Legislature is taking steps to provide wells and feeding stations. The road will connect at La Paz with that from San Bernardino, which is smooth, with but little sand, and already provided with tanks and stations. The whole distance from San Bernardino to Prescott, the capital of the Territory, is less than 350 miles. Emigrants from California to Central Arizona travel by these roads, or by those of about the same length from San Bernardino to Fort Mojave, and from there to Prescott.

Sixty miles from La Paz, on the road to Prescott

are the Harcuvar Mountains, which contain numerous valuable copper lodes, and the Penhatchapet Mountains, wherein very rich gold quartz has been found.

MOJAVE COUNTY.

This county is bounded on the east by the line of 113 deg. 20 min. west longitude ; on the north by the parrallel of 37 deg. north latitude ; on the west by the line of the State of California and the middle of the main channel of the Colorado River, and on the south by Williams' Fork and the main channel of the Santa Maria River above its junction with the latter stream. The seat of justice is established at Mojave City. This county lies directly north of Yuma County and is of the same general character.

Ascending the Colorado, the first point of interest is Williams' Fork, the southern line of the county. It is the largest tributary of the Colorado, and has its rise in the interior country almost as far east as Prescott. It is not navigable, but usually has a good body of water. Some of the richest copper mines in the territory are near to its banks, and have already been extensively and profitably worked. Quantities of the ore sent to Swansea have given a larger return than was expected, and it is clearly demonstrated that it will pay to ship to that place, or to Boston, if reduction works cannot be reached at a nearer point.

A road along Williams' Fork and its tributary, the Santa Maria, leads to Prescott, but it will need considerable work to be made popular. A company was chartered by the Legislature to improve it. In the opinion of Capt. Walker, the veteran pioneer of Central Arizona, and of others, the junction of Williams' Fork and the Colorado is the natural and best point for a large town or city; and a town named Aubry has been laid out there.

Fort Mojave, upon the Colorado, 160 miles above La Paz, is a noted point, and one of the longest occupied in the territory by the whites. Within a mile of the fort is Mojave City, a sprightly town laid out and chiefly built by the California volunteers stationed at the fort for two or three years past. There are some good agricultural lands in the vicinity, and gardens abound. The visit of the chief of the Mojave Indians (Ireteba) to New York and Washington in 1863–'4, gave him such an exalted opinion of the white man and the power of the General Government, that he has not ceased to urge his people to the most friendly relations, and to habits of industry and enterprise.

At Mojave, as at La Paz and Fort Yuma, there is a well-regulated ferry across the Colorado, with scows calculated to convey wagons and stock.

Hardyville, nine miles above Mojave, upon the

Colorado, is a young, but active and hopeful settlement. It has a large trade from the quartz mining districts around it, and even from the Wauba Yuma district, 40 miles in the interior, and from Prescott, the capital, 160 miles inland.

Recently the Utah people have flocked to Hardyville for their annual supplies, finding it much easier than to go, as heretofore, to San Bernardino and Los Angelos.

The mines of the several districts contiguous to Mojave and Hardyville, and of Eldorado Canon, 60 miles further up the river, are among the most noted and promising in the newly-known portions of Arizona. The ledges are many of them very large; the ores, both of gold and silver, the latter predominating, are surprisingly rich. Considerable money has already been expended in opening the lodes; one or two mills are in operation, and others are contracted for. Immediately upon the river there is a dearth of wood, but a supply may be had from the Sacramento and Wauba Yuma districts, and from the Vegas, 30 miles north of El Dorado Canon, or from the Buckskin Mountains, 100 miles north. Rafted down the river, it would cost but little more than for the cutting. Some mountains 60 miles above El Dorado Canon, and within six miles of the river, contain salt in beautiful transparent crystals, and of the finest quality.

The navigation of the Colorado above El Dorado Canon has only been attempted (excepting by Ives) since the Mormon trade began to attract attention and to assume importance. It has been ascertained by trial that steamboats may ascend at all seasons to a point 100 miles north of Hardyville, and less than 400 miles from Great Salt Lake City, by a road over which goods may be hauled without difficulty. At this point upon the river, a town named Callville is just begun. It will be the depot for Utah, and of course more convenient than Hardyville. Callville is but a little more than 100 miles south of St. George, a thrifty Mormon town close upon the Arizona line, if not within the Territory, and from which place, and the fertile district about it, supplies of cheese, butter, vegetables and fruit, have already found their way to the mining districts of El Dorado Canon, Hardyville and Mojave.

The Colorado is the largest river between the Mississippi and the Pacific, and the only navigable stream in Arizona. Its position between the Territory and California, its connection with the Gulf and the Pacific, the vast mineral wealth of its banks, and the important trade of Arizona and Utah, make it a most valuable highway, and one to the navigation of which careful attention should be given. With a constantly changing channel, a swift current, and a bed of

quicksand, it requires experience, patience and skill, to conduct the steamers with safety. These are necessarily of light draft, and limited accommodation for freight. It is believed that those now in use may, by remodeling, be greatly improved in speed and capacity, and that freight may be delivered at much less cost of time and money than is now required. In the upper part of the river are a few obstructions, for the removal of which a small appropriation has been asked from Congress.

The present rates of freight are from two to three cents per pound from San Francisco, to towns as high up the river as La Paz, and four cents to Hardyville; probably six to Callville. Ore is carried to San Francisco for from $20 to $25 per ton. This is considerably cheaper than transportation can be had by the roads across California. As yet there is only an irregular line of sailing vessels from San Francisco to the mouth of Colorado, (one hundred miles below Fort Puma,) and upon an average three weeks are consumed in making the voyage. With a line of propellers, as projected, this time might be be reduced to a week or ten days.

YAVAPAI COUNTY.

This county is bounded on the east by the line of the Territory of New Mexico; on the north by the

parallel of 37 deg. north latitude; on the west by the line of 113 deg. 20 min. west longitude, and on the south by the middle of the main channel of the Gila River. The seat of justice is established at Prescott, which is also the capital of the Territory. Yavapai County embraces a part of Arizona as yet unknown to the map makers, and in which the Territorial officers arrived hard upon the heels of the first white inhabitants. Until 1863, saving for a short distance above the Gila, it was even to the daring trapper and adventursome gold-seeker a *terra incognita*, although one of the richest mineral, agricultural, grazing and timber divisions of the Territory, and abundantly supplied with game. Yavapai County is nearly as large as the State of New York. The Verde and Salinas Rivers, tributaries of the Gila, which run through its centre, abound in evidences of a former civilization. Here are the most extensive and impressive ruins to be found in the Territory—relics of cities, of aqueducts, acequias and canals; of mining and farming operations, and of other employments, indicating an industrious and enterprising people. Mr. Bartlett refers to these ruins as traditionally reported to him, to show the extent of the agricultural population formerly supported here, as well as to furnish an argument to sustain the opinion that this is one of the most desirable posi-

tions for an agricultural settlement of any between the Rio Grande and the Colorado. The same authority says a district north of and immediately contiguous to the Gila River is, *par excellence*, the finest agricultural district in our territories lying in the same latitude, between Eastern Texas and the Pacific—for the great extent and richness of the soil; the abundance and excellence of the water; the cottonwood timber for building purposes; the fine quarries of stone in the adjacent hills, and for the facility with which it may be approached from every quarter.

The district in question lies at the junction, and in a measure forms the delta of the Salinas and Gila Rivers. It lies but a little above the bed of the river, and might be, in consequence, easily irrigated. The arable bottom land is from two to four miles in width, and is overgrown with mesquit; while on the river's margin grow large cottonwoods. The river is from eighty to one hundred and twenty feet wide, from two to four feet deep, and both rapid and clear. In these respects it differs from the Gila, which is sluggish and muddy for two hundred miles.

A portion of the Gila valley is occupied by two tribes of Indians, noted for their good traits—the Pimas and Maricopas. The lands cultivated extend from sixteen to twenty miles along the river, center-

ing at the Pima villages. Irrigating canals conduct the water of the Gila over all the district. The Indians raise wheat, corn, millet, beans, pumpkins and melons, in great abundance. They also raise a superior quality of cotton, from which they spin and weave their own garments. There is a steam grist mill at the Pima villages, and a large quantity of excellent flour is annually made. I have no doubt that the Gila bottoms alone afford arable land sufficient to raise food for a densely-populated State. But these are by no means all of the agricultural lands of Yavapai County. The Val de Chino, so called by Whipple, where Fort Whipple was first established, and the territorial officers first halted, is nearly one hundred miles in length, and abounds in tillable and pastural lands. The valley of the Little Colorado, on the 35th parallel, is large and well adapted to cultivation. There are numerous other valleys near to Prescott, and the road from the Colorado River, via Mojave and Hardyville, to that place, is described by a recent traveler as being "for over a hundred miles of the way a prairie country that would compare with the best in the world for grazing, and with most of the Western States for agriculture."

In timber lands Yavapai County exceeds all others in the territory. Beginning some miles south

of Prescott, and running north of the San Francisco Mountain, is a forest of yellow pine, interspersed with oak, sufficient to supply all the timber for building material, for mining, and for fuel that can be required for a large population.

At a distance of forty miles north of the Gila River, Yavapai County becomes mountainous, and on every side are mines of gold, silver and copper. The placer diggings upon the Hassayampa, the Agua Frio, Lynx Creek, and other streams in this region, now known as Central Arizona, were first found by the explorers, Capts. Walker and Weaver, in 1863. They entered the country simultaneously, though without concert of action, one coming from the Glia and one from the Colorado. In the same year the quartz lodes attracted attention, and people flocked to the district from all quarters. The territorial officers, then on the Rio Grande *en route* for the territory, were induced to turn westward, via the 35th parallel or Whipple route, and make a personal examination of the country. The investigations of Governor Goodwin, who spent some months in travel over the territory, going as far south as the Sonora line, and east to the Verde and Salinas, convinced him that this promised to be a most important and populous section, and here he concluded to convene the first Legislative Assembly.

Prescott, the capital, is in the heart of a mining district, second, in my judgment, to none upon the Pacific coast. The surface ores of thirty mines of gold, silver and copper, which I had assayed in San Francisco, were pronounced equal to any surface ores ever tested by the metallurgists, who are among the most skillful and experienced in the city, and, so far as ore has been had from a depth, it fully sustains its reputation. The veins are large and boldly defined, and the ores are of varied classes, usually such as to be readily and inexpensively worked, while the facilities for working them are of a superior order. At the ledges is an abundant supply of wood and water; near at hand are grazing and farming lands, and roads may be opened in every direction without great cost. The altitude is so great that the temperature is never oppressively warm; the nights, even in midsummer, are refreshingly cool and bracing. The ascent from the river by the roads from La Paz and Mojave is so easy, that with the small amount of work already done upon the same, the heaviest machinery may be readily transported. The distance by either road is about one hundred and sixty miles and the charge for freight from six cents to eight cents per pound. Contracts may now be made for the delivery of machinery at Prescott from San Francisco, via the Colorado, for ten cents per pound.

Prescott is built exclusively of wood, and inhabited almost entirely by Americans, mainly from California and Colorado. Picturesquely located in the pine-clad mountains, it resembles a town in Northern New England. The first house was erected in June last, and now the town has some hundreds of inhabitants, and the country for fifty miles about, including a dozen mining districts and farming valleys, is largely taken up by settlers. The valleys will, it is thought, produce good crops without irrigation, as the rains in this region are frequent and heavy.

The Territorial Government is now permanently established, giving to all the protection of the laws, as far as it is possible to do so. Those who are within the somewhat settled sections now have all the protection necessary for life and property. Prescott, the capital, is situated near the center of the territory; it has a printing establishment, churches and schools, and is something of a city on the plain upon which it stands. It was the principal home station of the Butterfield Overland stages by the Santa Fe route to San Francisco. Being eligibly located on the north branch of the Gila River, and having direct communication with the Pacific coast by a good wagon road to Los Angelos, gives it a business prominence which will be largely in-

creased as facilities are extended and the country more improved.

The law here regulating the location, ownership and development of mining lands, is the best devised on the subject, and ought to be adopted in other mining territories.

I would most respectfully urge my readers who are fortunate enough to be in San Francisco, to take the coast steamer and go down to Los Angelos, and visit for a trifling expense a very interesting section of the lower part of California, the great Colorado River and Western Arizona. To miss seeing this important part of the coast would be too great a sacrifice for the traveler to make.

CHAPTER XXI.

TRAPPING BEAVER.

While traveling through some of the mountain ranges where, thickly wooded along the streams, my attention was often attracted by the work of these mysterious animals, for they had been very numerous in favorable locations for them during many years past, notwithstanding the many traps set for them by skillful hands. Most of them have been caught, but their works do not follow them. They are remarkably shy, seldom seen by daylight, and have such a keen sense of hearing, that nothing can approach near enough to see them before they disappear under the water.

When at Albany a short time since, I visited for the first time since my return the Agricultural Rooms, and saw there several very good specimens of their work, recently obtained, to perpetuate their skill and labor. I examined them with more than ordinary interest, having seen and investigated much of their rather remarkable works.

These animals have been numerously found in all these mountain regions, and have been trapped in all possible ways for their valuable furs, which has

been no inconsiderable profit to the trapper and the trader in time past.

While in a placer mining town on the Arkansas River, I met an old mountain trapper, now mining and trapping occasionally, from whom I obtained the substance of the following article, which is so complete that I have thought it might not be uninteresting to the reader. The beaver is caught usually with an ordinary steel trap weighing about five pounds; a chain is attached to it a few feet long, having a snivel and ring at the end, which revolves around what is called a float—a dry piece of wood. The trap is placed in shallow water about six inches deep, when the float is attached to the chain, and driven firmly into the ground, so that the beaver cannot pull it out. A small twig, dipped in musk or castor, is used for bait, and is suspended directly over the set trap. The trapper returns to the bank and throws water over his tracks, to wash out any footsteps or scent by which the beaver would be frightened, then remains in the stream for some distance before he wades out. Care must be taken to place the bait just where the beaver will spring the trap when reaching it. Should the bait stick be placed high the hind foot will be caught, if low the fore foot. The trap must be firmly fixed, and at the proper distance from the shore, for if the beaver

BEAVER SPRINGING A TRAP.

can get out of the water with the trap he will at once eat off his leg to escape.

The way in which the beavers construct their dam and make their lodge has been considered among the wonders of the animal instinct. Some have claimed for the little creature more, no doubt, than belongs to it, yet its sagacity is somewhat wonderful. It certainly does know how to make the water of a stream rise to a given level by placing obstructions across the channel to back up the water.

It is not true, however, that it can always fall a tree in the proper direction for this purpose. I saw very many lodged, which they had ate off, but generally lay in the direction of the water; but trees generally along the banks of streams take the direction of the water by gravitation.

When they are successful—get a tree down in where they want it—they take their places along the body of it, like good wood-choppers, and begin to take off the logs the various lengths required for their dam—regard being had as to their being able to remove it where needed. When put in place, they secure it with sticks, stones and mud.

The work is commenced when the water is low, and continued as it rises, until the desired height is attained. They manifest some very good engineering. The dam is not only built of the requisite

height and strength, but its shape is suited to the place and the stream in which it is built.

Should the water be sluggish, and little current, the dam is straight; if turbulent, the dam is constructed of a convex form—the better to resist the current, made much thicker and stronger, where the action of the water is the greatest.

After many years, the water being spread over a a large space, often filled up by yearly accumulations, seeds take root in the new made ground, and the old beaver dam becomes a green meadow, or thickets of young trees. The beaver subsists on the bark of young trees; and when laying up a winter supply, all the workers in the community unite their labors of selecting, cutting up and carting the strips to their common store-house under water.

"The beaver has two incisors and eight molars in each jaw; and empty hollows where the canine teeth might be. The upper pair of cutting teeth extend far into the jaw, with a curve of rather more than a semicircle; and the lower pair of incisors form rather less than a semicircle. Sometimes, one of these teeth gets broken, and then the opposite tooth continues growing until it forms a nearly complete circle. The chewing muscle of the beaver is strengthened by tendons in such a way as to give it great power. But more is needed to enable the beaver to

eat wood. The insalivation of the dry food is provided for by the extraordinary size of the salivary glands.

"Now, every part of these instruments is of vital importance to the beavers. The loss of an incisor involves the formation of an obstructive circular tooth; deficiency of saliva renders the food indigestible; and when old age comes, and the enamel is worn down faster than it is renewed, the beaver is no longer able to cut branches for its support. Old, feeble and poor; unable to borrow, and ashamed to beg, he steals cuttings, and subjects himself to the penalty assigned to theft. Aged beavers are often found dead with gashes in their bodies, showing that they have been killed by their mates. In the fall of 1864, a very aged beaver was caught in one of the dams of the Esconawba River, and this was the reflection of a great authority on the occasion, one Ah-she-goes, an Ojibwa trapper: 'Had he escaped the trap, he would have been killed before the winter was over, by other beavers, for stealing cuttings.'

"When the beavers are about two or three years old, their teeth are in the best condition for cutting. On the Upper Missouri, they cut the cotton tree and the willow bush; around Hudson's Bay and Lake Superior, in addition to the willow they cut the poplar and maple, hemlock, spruce and pine. The cutting

is round and round, and deepest upon the side on which they wish the tree to fall. Indians and trappers have seen beavers cutting trees. The felling of a tree is a family affair. No more than a single pair, with two or three young ones, are engaged at a time. The adults take the cutting in turns—one gnawing and the other watching; and occasionally a youngster trying his incisors. The beaver whilst gnawing, sits on his plantigrade hind legs, which keep him conveniently upright. When the tree begins to crackle, the beavers work cautiously; and when it crashes down, they plunge into the pond, fearful lest the noise should attract an enemy to the spot. After the tree-fall comes the lopping of the branches. A single tree may be winter provision for a family. Branches five or six inches thick, have to be cut into proper lengths for transport, and are then taken home."

The lodge is usually five or six feet in diameter, and about half as high; dome-shaped, with thick, strong walls, and communicate with the shore by subterranean passages, below where the water freezes in winter. Their lodges are made to accommodate a family, and each has its own bed, properly placed round the walls. Their domestic life is one of order and neatness—a place for everything, and everything in its place. After eating, the dishes are

washed up—unusual for the country! The sticks that have been stripped are carefully packed up and carried out, either to repair their dam, or be thrown into the stream.

During the summer months the beavers leave their winter home and travel about the streams, occasionally making quite long journeys. Should any remain at home they are the mothers of little families. About the first of September the community return home and begin their preparations for the responsible duties of the long winter months. This habit, like that of the crowning work of creation, has exceptions. There are a certain few individuals, who have no families, make no dam, do no work, and never live in family lodges, but live by themselves, oyster-like, in a shell in subterranean recesses—idlers, and the trappers call them "bachelors!"

Several of them are sometimes found in one abode, which the trappers denominate "bachelor's hall." They are more easily taken, and the trapper is always glad to come upon their habitations.

The season for trapping beaver is spring and fall. Should the business be continued in winter, they are captured by sounding on the ice until an opening is discovered, when the ice is removed and the opening closed up. Returning to the bank, search is made to find the subterranean passage and trace it

to the lodge, and by watching succeed in catching the animal on some of its travels between the water and the land. This is seldom resorted to, only when urged by famine to take them for food.

Sometimes, several members of a beaver family are trapped in succession, when the survivors become very shy, and can't be "brought to medicine," to use a trapper's phrase. Then the trapper gives up the use of bait, and carefully conceals his traps in the paths of the community.

The beaver now approaches these carefully, and sometimes springs them with a stick; other times, the trap is turned bottom upwards, by the same means; sometimes he drags them away and conceals them in the mud. When this occurs, the trapper gives up the strife of ingenuity, shoulders his traps and leaves, thus confessing that he is not "up to beaver."

CHAPTER XXII.

FROM DENVER TO CHEYENNE.

Having completed our travels, and given as lengthy a description of that more southern section of our country as our space will permit, we return again to this place, and begin our more northern wanderings. Being now hardened by journeyings and out-door life, in pure air, we can easily anticipate twenty hours' pleasure under warm sun and the agreeable coolness of evening, and the most brilliant starlight, equaled only in any other land, but never surpassed. The skies send down their greatest beauty through the thin, pure air of evening, new and very interesting to those who come here the first time.

While waiting for the branch road to be completed from Cheyenne to Denver, we travel this hundred miles in a stage coach. Could it be done wholly by daylight nothing would be more agreeable. The road lies along the base of the mountain ranges, through low foot-hills, over rolling plains, divided occasionally by a vigorous mountain stream mingling with the plain below, with lines of trees marking their course from the mountains to the gently-sink-

ing thirsty plains towards the wide-reaching eastern horizon. On the west, old grim mountains topped with rock and snow; to the east, the unending plains, with an occasional cabin, and scattered herds of cattle and a few horses to relieve its majestic sameness and indicate the presence of civilized settlement. There is a magnificent out-doorness in the constant change of scene, which no smaller or differently made up landscape can give. The road presents to the traveler varied and constant views of remarkable interest. The green grass, the wild flowers, and the many other ranges, one towering high behind the other until the great central is boldly brought to view, spread along with perpetual snow, together with the ocean of plain, the several large streams coming down from the mountain canyons, mingling with the plain below, making the otherwise barrenness to blossom and bring forth abundantly.

About every ten or twelve miles we change horses; the driver announces his approach to a station either by day or night with a war-hoop, which "must be heard to be appreciated." It is certainly startling to unaccustomed ears. Every thirty or forty miles is a home station and a "square meal." Dinner, supper and breakfast are very much alike; the only real difference is in the price. But we missed, quite willingly, the other kind of "home stations" we en-

countered through here in our "Across the Continent" two years before. The accommodations were largely improved. No longer a single-roomed turf cabin floor such as nature offers; only half-spoiled bacon; miserable poor bread; often without butter or milk or any kind of vegetables; and if you are not pleased, or "don't like these, help yourself to mustard," at two dollars a meal.

But now the traveler finds here a more substantial home, surrounded with good home supplies. Occasionally we sat down to good beef and ham, a variety of vegetables, good bread and butter, pies, canned fruits, tea and coffee and other luxuries which the country afforded for half the former price, without the edges of the "squareness" of the meal rubbed off. The first rough fight, with all the elements of savage nature, had given place to more comfortable accommodations.

There are several large and interesting streams which cross our road, in fording one of which we were obliged to exercise our swimming ability, while those who could not, held on to the floating coach. The stream was very much swollen from the melting snows in the mountains. The lead mules when about midway of the stream turned their faces towards the driver, and became entangled in the harness, and the wheel team so much so, by turning

short round threw the stage quite over on one side, and the body of it nearly filled with water, so that those inside found it quite necessary to make a very hasty exit outside to find breathing room. As the current was quite strong, all were carried down stream some distance before reaching the shore. Soon, however, all were out without injury save a thorough drenching; but the hot sun and unusually dry air very soon dried wet clothing. The team and stage out, we are soon on our way again.

With this little experience we approached the other young river across the road with more precaution, the St. Vrains. Here everything was removed from the stage, piled on a little flat raft and ferried across the stream, and then three persons at a time. After baggage and passengers were over the horses were swam over, and a long rope tied to the end of the stage tongue, when a team drew it to the opposite shore.

From the middle of June to August, during the beginning of the warmest weather, when the accumulated snows in the mountains begin to melt, these streams become much enlarged, and are quite rapid, while at other times they are crossed with ease and safety. Sometimes too great risks are taken.

CHAPTER XXIII.

WYOMING TERRITORY.

This comparatively new territory, was mostly taken from the southern part of Montana, and is about as large as Colorado, and lies wholly within the mountain ranges. Bounded by the Rocky Mountains on the west, and the various ranges of the Black Hills starting from its southern border, penetrate the entire territory to the northeast. It had a few years ago an infant organization as a territory, with but a very little population—more to give a few aspirants place and profit, than necessity. It had neither agriculture nor mining; consequently, no population previous to building the Railway, which has now imparted to it settlement, and some notoriety.

The new railroad town of Cheyenne is the only settlement of any importance, and is the Capitol of the Territory, situated a little out from the mountains on the naked plain, six thousand feet above sea level. It has already assumed an air of permanency, and taken on the hopes of promise. After "Hell," as the end town of the railroad was called, moved it on, was a very important question, whether to be or not to be—whether the place was truly anything or noth-

ing. The problem is now settled in her favor. Situated at the end of the plains, at the front of the mountains, the railroad must have extensive shops here. It is the central point of divergence to all the southern country, and the railroad to Denver makes its connection with the main line here. Ultimately, the St. Louis Pacific Railroad will, as Congress has directed, make a connection with this branch.

Cheyenne has now over three thousand inhabitants who are settling down into soberness and permanent work. Two daily papers are asking for support. Some good church buildings are already erected. Permanent buildings of brick and stone have already taken the place of canvass and boards for building materials.

Hotels, stores, restaurants and many other kinds of business, are quite largely represented—ready to respond to all human appetites, tastes and needs. Most of this territory can never be used for agricultural purposes, on account of its unevenness. Yet there are some valleys which offer very good advantages, though quite limited for so large a territory, that will support at least a small farming population. The North Platte crosses the entire territory; west and east winds through the mountains, forming some good bottom lands, rich and fertile. Farther north are the Cheyenne, Powder and Big Horn Rivers, and

their tributaries flowing north to the Yellow Stone, watering a large portion of this territory. But its past history is mostly that of the hunter and trapper; and what it will do. or is capable of doing, is among the unknown things of the future. However, she can rely upon Northern Colorado for a supply of all her material wants.

The large and productive valleys not far south, watered by the Oache-a-la Pudre, St. Vrains, Big Thompson, Little Thompson, Boulder and Clear Creek, will be glad to find a ready market at Cheyenne for their large surplus produce. We would almost be criminally guilty, should we omit, in this place, to inform a certain class of lady readers, who sometimes lecture even in public, (but we presume more often in private,) to convince their law-makers that they are not clothed with "inalienable rights;" that their would-be master bridles their liberty.

The philanthropic Territorial Legislature of Wyoming, fully appreciating "Women's Rights" by understanding the many wrongs they were obliged to endure in all this great and otherwise freedom-loving land, were the first in this great interest to extend to woman the elective franchise. The law here gives both sexes the same rights as to voting; and that class of ladies who truly wish to enjoy such privileges, can very soon (with the present traveling fa-

cilities) not only see, but be landed in a short time safely in this promised land to them, where they sit, if not under a fig tree, under the lengthened shadows of the mountains, in the fullness of that great ballot power which makes and unmakes States and Empires.

Incidentally we would also say, that most of these humane legislators are traveling the road of life alone, as is also most of the large-hearted men in this country; and those single ladies who come here to have their rights (denied them at home) will, on coming here, be more fully persuaded that it is not good always to live alone, more especially among a class of such men who are the first to offer them all the civil and political privileges they possess. The wholesome laws which will hereafter govern Wyoming will be, no doubt, made of golden material, and will, to a large extent, make up for her rugged mountains and unproductive surface.

CHAPTER XXIV.

MONTANA—MINING, AGRICULTURAL RESOUCES, HISTORY AND CLIMATE.

This territory was formerly a part of Idaho, but after gold was discovered here, and mining towns grew up, and settlement began, it was found that the immense mountain ranges embraced in the limits of Idaho formed such barriers to past legislative communication and intercourse—the East from the West—that a division of the territory was demanded, and granted by Congress in 1864, setting off all the country lying east of the summit of the Bitter Root Mountain range, and erecting the present territory of Montana, the largest territory of the United States, covering an area of considerably more than 201,000 square miles. Previous to 1860, when gold was discovered here, very little was known of this immense territory except the mountain man's home, for hunting and trapping, on the head waters and streams of the several branches of the Missouri, which, like the limbs of a tree, reach in all directions through the entire territory, giving water communication with the east as far as Fort Benton, just above the great Missouri Falls. The Yellow Stone,

together with its large tributaries, water the southern section, giving the miner and agriculturist good advantages.

Down in the deep valley of Grasshopper Creek we find the little mining town of Bannack, so named from a savage tribe. Here began the settlement of Montana in 1861, in the southwest corner of the territory. Placer diggings of unusual richness were discovered here, giving as high as fifty dollars per day to the man. Excitement ran unbridled; miners and others flocked in from all directions; the little gulch soon held within its narrow hive two thousand people. The place soon went through the first lessons which such wild mining excitements usually undergo: drinking saloons without number, densely crowded; gambling tables were musical with ringing coin and shining with yellow dust; theaters, which seem to be indigenous in mining regions, were crowded; whisky fifty cents a drink, and champagne only twelve dollars per bottle. But these, like other mines of the kind, were soon exhausted—worked out—and the inhabitants thereof pass on to another Eldorado.

Now the place is a good representation of the very many we had seen in other mining sections of the country, a gloomy succession of deserted brush and dirt cabins and log houses, in the midst of

which stood a gallows, as if proud of the good service it had rendered to the injured people. For a long time almost the first out-door look of the people was towards this court of justice, to see if some reprobate had not the punishment due his many crimes. No other mining country suffered so severely by desperate bands of outlaws as this. Every new rich mining region attracts thieves and murderers—brings together the very worst elements, out of which the worst kind of humanity is made, and sooner or later purges itself through the terrible vengeance of Lynch law. After hundreds of homicides and robberies the Vigilants organized, captured and executed many of the worst desperadoes, and sent out of the country many others. With this salutary warning to the surviving cutthroats, life and property became a little more secure. The County Sheriff who erected this gallows was, Haman-like, hung upon it himself for murder and robbery.

Virginia City, the present metropolis of Montana, was established in 1862, after the Bannack mines were worked out. It is the largest settlement of the territory, sixty-five miles north of Bannack, situated in Fairweather gulch, on Alder Creek, and lies along the irregular winding stream for a distance of ten miles. This gulch has yielded for a distance of

thirteen miles more gold than any other place of equal extent on the continent. It is now wholly cut to pieces with shafts, ditches and tunnels, and as miners say, worked out. But the place commands a large Southern trade, and also from the surrounding country, together with many remunerative quartz mines, which are worked by companies, giving the place more permanency and prosperity than usually belong to mining towns.

One hundred and twenty miles north is Helena, the legitimate offspring of Virginia, as is Virginia of Bannack. Unusual rich mines were prospected here, and the town of Helena at once grew up. The productive mines, and the general business of the country East and North, enabled it to put on the air of permanence and prosperity. It soon became the supply town for the rich placer mines of the Blackfoot country, and has, no doubt, a prosperous future from its geographical position, and will become one of the principal cities, if not the principal city, of the territory.

Montana has produced the largest nugget of gold yet found in this country, and has yielded more treasure in proportion to the amount of work done than any other placer mining country on the continent, and its quartz veins promise to average as well, or better, than those of many other regions.

On account of the remoteness and inaccessibility of the country, lying far north, in the very center of the mountains, makes labor expensive and very difficult to transport the heavy machinery to some of the interior mines. Many companies in the East have erected quartz mills in various districts, and generally are being well rewarded.

As we have said, Montana covers a large territory—eight hundred miles from east to west, by about three hundred from north to south, and is well named, being wholly within the mountains. It contains several large basins, and unnumbered valleys, through which flow many rivers and smaller tributaries, in which the permanent settler and the miner find, and build up homes of plenty and surround themselves with the comforts of an Eastern home; and getting prices for their products which would be almost fabulous in more accessible countries. While snow lies heavy upon the mountains, cattle fatten on the bunch grass of the valleys. Summer and winter are next-door neighbors. Here we often find the greenest vegetation and deep snow less than a mile apart.

Those who have made themselves more thoroughly acquainted with Montana, agree in pronouncing it a delightful mountain country, containing all the social and political elements out of which to make a

great commonwealth. Wherever the precious metals are largely found, either in rock or loose earth, they soon work out the miracles of our portable civilization. Towns hastily spring up in the wilderness, and cities among the mountains—taking shining treasures from granite hills, and rescuing fruitful farms from lonely valleys.

Our wild mining regions are ever full of interest to the thoughtful traveler. Their early prospectors have braved savage Indians, and equally savage nature; endured all kinds of deprivations, hard work, long banishment from the comforts of civilized life, home and friends. That spirit who can see nothing in this beyond the grasp of gold, is poor indeed. With a commendable ambition for pecuniary success, it blends that marvelous element in our national life, which has in a few years carried our freedom and our flag from the central continental rivers to the Pacific.

But as gold hunters are not always to be credited, by those who have no interest in their favorite region, we ignore their statements, and give the opinion of one who had no other business, only to explore it. The Report of Gov. Stevens, on the Northern Pacific Railroad, to start from St. Paul and connect with the head of navigation on the Columbia, at Fort Walla-Walla, the reader will find interesting;

"If the voyageur traveling over this country, whatever route he takes, be asked what sort of a country it is, he will tell you, an excellent country for traveling—wood, water, and grass everywhere. But the pine of the Spokane extends nearly to its mouth, and for some miles south of the river. The Spokane is the name of the main stream to its junction with the Coeur d' Alene river, when its name is given to a smaller tributary coming from the north, the Coeur de' Alene being the main stream. One of the most beautiful features of the Coeur d' Alene river and country is the Coeur d' Alene lake, which is embosomed in the midst of gently sloping hills, covered with a dense forest growth; the irregularity of its form, and the changing aspect of the country about it, makes it one of the most picturesque scenes in the country. The Coeur d' Alene river itself has tributaries flowing from near the main divide of the Bitter Root, the most considerable of which is the St. Joseph's river, which has a general parallel direction with the Coeur d' Alene, and is about twenty miles south of it.

"The whole valley of the Coeur d' Alene and Spokane, is well adapted to settlement, abounding in timber for building and for fires, exceedingly well watered, and the greater portion of the land arable. North of the Great Plain—that is, from the Spokane

to the 49th parallel east of the main Columbia—the country for the most part is densely wooded, although many valleys and open places occur, some of them now occupied by settlers, and all presenting advantages for settlement. Down Clarke's Fork itself, there are open patches of considerable size; and so on the Kootenai River. North of the Spokane is a large prairie, known as the Coeur d' Alene prairie, through which the trail passes from Walla-Walla to Lake Pend d' Oreille. This prairie contains some six hundred square miles. * * * * * * * *

"It is the country, therefore, between these two great backbones of the Rocky Mountains, which I now wish to describe; and especially will I first call attention to that beautiful region whose streams, flowing from the great semicircle of the Rocky Mountains before referred to, pass through a delightful grazing and arable country, and find their confluence in the Bitter Root River, opposite Hell Gate.

"From Big Hole Prairie, on the south, flows the Bitter Root River, which has also a branch from the southwest, up which a trail is much used by Indians and voyageurs passing to the Nez Perce country and Walla-Walla. The Bitter Root Valley, above Hell-Gate River, is about eighty miles long, and from three to ten in width, having a direction north and south from the sources of the Bitter Root River to

its junction with the Hell-Gate. Besides the outlet above mentioned, (omitted here,) towards the Kooskooskia, which is the most difficult, it has an excellent wagon-road communication at its head, by the Big Hole Pass to Jefferson's Fork, Fort Hall, and other points southward, as well as by the Hell-Gate routes to the eastward. From its lower end, at the junction of the Hell-Gate, it is believed the Bitter Root River is, or can be made, navigable for small steamers for long distances, at least, thus affording an easy outlet to its products in the natural direction. Hell-Gate (Pass) is the debauche of all the considerable streams which flow into the Bitter Root, eighty-five miles below its source at the Big Hole divide. The distance from Hell-Gate to its junction with the Bitter Root is fifteen miles. It must not be understood from the term Hell-Gate, that here is a narrow passage with perpendicular bluffs; on the contrary, it is a wide, open and easy pass, in no case being less than half a mile wide, and the banks not subject to overflow. At Hell-Gate is the junction of two streams; the one being the Hell-Gate River, and the other the Big Blackfoot River. The Hell-Gate itself drains the semicircle of the Rocky Mountains, from parallel 45 deg. 45 min., to parallel 46 deg. 30 min., a distance on the divide of eighty miles. The upper waters of this river connect with Wisdom

River, over a low and easy divide, across which Lieut. Mullan with his party moved on Dec. 31, 1853.

"Moving down this valley fifteen miles, we come to a most beautiful prairie known as the Deer Lodge, a great resort for game, and a favorite resting place for Indians—mild through the winter, and affording inexhaustible grass the year round. There is a remarkable curiosity in this valley—the Boiling Springs—which have been described by Lieut. Mullan. This Deer Lodge Prairie is watered by many streams; those coming from the east, having their sources also in the Rocky Mountain divide, and those coming from the west in the low, rolling and open country intervening between the Hell-Gate and Bitter Root Rivers.

"The Little Blackfoot, which has been referred to, is one of the most important streams on the line of communication through this whole mountain region. It has an open, well-grassed and arable valley, with sweet cotton-wood on the streams, and pine generally on the slopes of the hills; but the forests are quite open, and both on its northern and southern slopes there is much prairie country. The Little Blackfoot River furnishes two outlets to the country to the east. It was the southern one of these passes, connecting with the southern tributary of the Prickly Pear Creek, that Mr. Tinkham passed over in 1853, and

determined a profile of the route. It was also passed over by Lieut. Mullan on his trip from the Muscle Shell, in 1853; but the northern pass was first discovered by Lieut. Mullan when he passed over it with a wagon from Fort Benton, in March, 1854. There is another tributary of the Little Blackfoot flowing into it below the point where Lieut. Mullan struck it with his wagon, which may furnish a good pass to the plains of the Missouri. Its advantages and character were described to him by the Indians.

"Passing down the Hell-Gate River, from the mouth of the Little Blackfoot, we come to several tributaries flowing from the south. Flint Creek, one of them, is a large stream, up the valley of which there is a short route to the Bitter Root Valley, in a direction west-southwest from its junction with Hell-Gate. On these rivers are prairies as large as the Deer Lodge Prairie, and the whole country between the Deer Lodge Prairie due west to the Bitter Root Valley consists of much more of prairie than of forest land.

"The Hell-Gate River is thus seen to be one hundred and thirty miles long, flowing for sixty miles through the broad and fertile Deer Lodge Prairie, which is estimated to contain eight hundred square miles of arable land. Then, taking a direction more transverse to the mountain, opens its valley, contin-

ues from two to five miles wide, until its junction with the Big Blackfoot, at Hell-Gate; after which, it widens out to unite with the valley of the Bitter Root. On this part of it there are at least one hundred and fifty square miles of fine arable land, and as much grazing prairie on the adjoining hills. *

"Passing from the Hell-Gate to the Flathead River, we cross over this spur by a low divide, going through the Coriacan defile, and coming upon the waters of the Jocko River. The height of this divide, above the Hell-Gate, is 560 feet; and above the Flathead River, at the mouth of the Jocko, is 650 feet. From this divide, a view of surpassing beauty, looking northward, is presented to the beholder. He sees before him an extraordinarily well-grassed, well-watered and inviting country. On the east are the divides, clothed with pine, separating the Jocko and its tributaries from the streams running into the Big Blackfoot, and into Flathead Lake. To the North, the Flathead Lake, twenty-five miles long and six miles wide, is spread open before you with extensive prairies beyond; and on the West, sloping back from the banks of the Flathead River, a mingled prairie and forest country is seen. Here, in a compact body, is one of the most promising countries in this whole region, having at least 2,000 square miles of arable land.

Below the Lake, the Flathead River flows, following its windings some fifty miles, to its junction with the Bitter Root, where the united streams assume the name of Clark's Fork. In this distance it is 100 to 200 yards wide, and so deep as to be fordable with difficulty at low water, its depth being three feet in the shallowest places. Its current is rapid, and there is a fall of fifteen feet, five miles below the lake. About eighteen miles below the lake, it receives a considerable stream from the northwest, called Hot Spring Creek. In its valley, and around it, is also a large extent of fine land. Nearly opposite, a small stream runs in from the East, and another from the same side ten miles below, by which there are routes to the upper part of Big Blackfoot Valley. None of the branches of Clarke's Fork above the junction, can be considered navigable; but the river itself, (Flathead,) with the exception of the rapids and falls below the lake, which may be passed by a short canal, gives a navigation of at least seventy-five miles to the head of Flathead Lake.

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About one hundred and thirty miles above the mouth of Clarke's Fork, is the Pend d'Oreille or Kalispelum Lake, which is a beautiful sheet of water about forty-five miles in length, formed by the dilation of the river. The river is sluggish and wide

for some twenty-six miles below the lake, where rapids occur during low water. Steamboats could ascend from this point to a point nine miles above the lake, or eighty miles in all. At high water they could ascend much farther. Between the Cabinet (twenty-five miles above the lake) and a point seventy-five miles below the lake, (a total distance of one hundred and forty miles,) the only obstacle which occurs is where the river is divided by rocky islands, with a fall of six and a-half feet on one side. The valley of Clarke's Fork is generally wide, arable, and inviting settlement, though much of it is wooded.

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From the divide of the Rocky Mountains to the divide of the Bitter Root Mountains, there is an intermediate region, over one-third of which is a cultivable area; and a large portion of it is prairie country, instead of a wooded or mountain country. The following estimate gives in detail the areas of arable land, so far as existing information enables it to be computed: In the region watered by the Bitter Root River and its tributaries, not including Hell-Gate, the prairie region may be estimated at three thousand square miles; in that watered by the Hell-Gate and its tributaries, including the whole country south and west to the Bitter Root, but not including the Big Blackfoot, there is a prairie region of two

thousand five hundred square miles; in that watered by the Big Blackfoot and its tributaries, the prairie region is one thousand three hundred square miles. The country watered by the Flathead River, down to its junction with the Bitter Root, and thence down Clarke's Fork to the Cabinet, has a prairie region of two thousand five hundred square miles. The country watered by the Kootenai has two thousand square miles of prairie. Thus we have, in round numbers, eleven thousand three hundred square miles of prairie land. The whole area of the mountain region, (from the divide of the Rocky Mountains to the divide of the Bitter Root, and from 45 deg. 30 min. to 49 deg.) is about thirty thousand square miles; and it will be a small estimate to put the arable land of the prairie and the forest at twelve thousand square miles. Thus, the country in the Forks of the Flathead and Bitter Root, stretching away east above the Blackfoot Canyon, is mostly table land, well watered and arable; and on all these tributaries—the Bitter Root, the Hell-Gate, the Big Blackfoot, the Jocko, the Hot Spring River, the Maple River, and the Lou-Lou Fork itself—the timberland will be found unquestionably better than the prairie land. It will not be in the immediate bottom or valley of the river where farmers will find their best locations, but on the smaller tributaries

some few miles above their junction with the main stream. The traveler passing up these rivers, and seeing a little tributary breaking out in the valley, will, on going up it, invariably come to an open and beautiful country. The observer who has passed through this country often; who has had with him intelligent men who have lived in it long; who understands intercourse with the Indians, and knows how to verify information which they give him, will be astonished at the conclusions which he will reach in regard to the agricultural advantages of this country, and it will not be many years before the progress of settlements will establish its superiority as an agricultural region."

The prediction of the late distinguished explorer is about to be realized, more rapidly perhaps than he had ever contemplated. Though owing its rapid settlement to the discovery of mines of gold and silver, Montana Territory is destined to retain a large proportion of its adventurous population, and to invite permanent settlers by the greatness of her varied resources, for besides the precious metals, her valleys abound in the more common and useful materials of marble, limestone, cinnabar, copper, sandstone, lead, plumbago, iron, coal, and the best of timber for lumbering purposes. Add to these a most healthful and delightful climate, and the

most agreeable scenery, and there is nothing left to desire which should constitute a happy home for thousands of hardy emigrants.

THE CLIMATE OF MONTANA.

The first remark of those who have not properly considered the matter, is, that a railroad so far north would be in winter obstructed by snows, which the real facts contradict, and will convince the intelligent reader that of two roads, the Central and the Northern, the latter would not be as liable to snow blockade as the former. The altitude of the Rocky Mountains in the latitude of Montana is two thousand feet less than it is on the line of the Central Road. The climate is modified and softened by the warm winds that come from the warm plains of the southwest over the hot springs of a large section of volcanic country in its southern part. Another modifying circumstance is the isothermal line which sweeps across it and takes its course westwardly to Puget's Sound, which has an annual temperature of 50 deg., thus settling the question of climate. There is, however, another fact in this connection in favor of Montana. If the reader has noted the fact, he has observed that the hunters and trappers of the Rocky Mountains never wintered down or about the South Pass, but their favorite wintering grounds were upon the Yellow Stone, or upon some of the

affluents of the Missouri, nearly east of the Pass, selected for the Northern Road. It was here the mountain men found grass and sweet cotton-wood for their animals, and it was in this more northern country where game resorted for food during the winter snows in large herds.

At Fort Benton, in Northern Montana, noted for being a trading post of the American Fur Company, which has an elevation of 2,662 feet above sea level, their horses and cattle, of which they had large numbers, were never housed or fed in winter, but obtained their own living without difficulty. The facts hardly sustain the general impression that the winter in this region has more snow, and is colder than in the more central ranges farther south.

CHAPTER XXV.

IDAHO—SHOSHONEE FALLS—BOISE CITY—IDAHO CITY —OWYHEE QUARTZ MILLS—CHARACTERISTIC FEATURES OF THE COUNTRY, &C.

This territory, since the division which now comprises Idaho, (an Indian word, signifying "the gem of the mountains,") lies wholly on the Pacific side of the Rocky Mountains, the water-shed forming its easterly boundary, and dividing the head waters of the Columbia from the head waters of the Missouri. The road from Salt Lake City is the same to Montana or Idaho as to Bear River Junction, a distance of one hundred and forty miles. There roads branch northwest and northeast. Taking the left branch, the traveler very soon finds himself in Idaho, surrounded with vast rolling wastes of sand deserts, sage brush and volcanic debris scattered profusely over the country. The old granite rocks had been both literally and truly turned inside out by subterranean forces far down in the deep bowels of the earth. This portion of the territory is interesting only for the magnificently broken surface and uninhabitableness, dreary and forbidding for the uses of civilized life. A few half-starved, degraded Utes

still wander about this forbidding tract, sometimes painted in true old Indian style with pulverized red chalk, giving them a more hideous and repulsive appearance than savages generally.

The stage stations are built of blocks of lava pierced with holes, for the use of arms to repel Indian warfare. Through all this great country every man's cabin is truly his castle, and he himself must defend it.

The comas-plant, with little blue flowers and small brown leaf, with a bulb like an onion, is found here, which the Indians dig and subsist on during the winter. Some of the ravines were quite covered with a plant called kinnikinic, a species of the real tobacco plant, which, in its young growth, it resembles largely. The Indians and others, when out of other tobacco, use this as a very good substitute for the cultivated kind; when dried and pulverized, it has the aroma of the noxious weed. Some distance east of the road is the great Comas prairie, rich and easy of irrigation from the mountain which encloses it, as the Mahlad River threads it, and like Humboldt and Carson, after running hundreds of miles, sinks like the waters of Damascus.

We were anxious to visit Shoshonee Falls, of Snake River, but four miles west of the road station which few white men had seen previous to 1867, and

is two hundred and sixty-five miles from Salt Lake City. The Indians call it Poh-chu-lak-a—the gift of the Great Spirit, and, like the red pipe stone quarry, was too sacred a place to be contaminated by white men; consequently their vigilance in guarding it. A party had been to see it a short time before, accompanied by a few soldiers at the station. One of these consented to accompany us. The six miles were made in an hour and a half over sand and sage brush. The vapor arising from it can be seen from the road when there is no wind. In this pure morning air, where the discharge of a pistol will make a report as great as a small cannon in low country atmosphere, sound in this high mountain country is conveyed as though made by a silver-tongued bell hung high up in the etherial dome.

We started in early morning, and had not proceeded far before the low, deep roar of the falls were heard, and pillars (not of a great Roman Pantheon) were rising up, but of clouds, or rather the blending of them from the troubled waters down in the deep caverns of rock. The mirage, before the sun is up, is as much to be admired as the waterfall, a mirage more wonderful than any I had witnessed in all my desert and mountain wanderings, surpassing an ordinary desert mirage as much as the splendors of an arctic night excel the clouds of a summer day. We

gazed and admired the clouds of vapor as they rolled over and through each other, changing in form and color, blending more than the colors of the rainbow; but a matchless combination of the roughest, to the most refined shades, celestial islands floating in mid air. As we were lost in admiration, the eastern horizon began to take on yellow and purple; the great round faced luminary, imparting light and warmth, began to send her streams of use and beauty between two sentinel mountains on the east, the "Gateway of the Day" here truly; but we had another last view, and all evaporated like a fascinating dream. Could an artist have placed it upon canvass? But who can "gild refined gold or paint the lilly? Who can paint the mountains, the seas or the skies?" Who will presume to fix limits upon the wonders of universal and prolific nature, or place boundaries upon the Divine love which permeates and suffuses it?

Going down some distance upon a second precipice, we were where a good view of the falls and river could be had. Looking down about five hundred feet, the river looked as peaceful as a summer sun. Not far above, the falls are in full view. The stream is divided into several channels by small islands of rock coming together, and uniting their strength before taking the swift, dizzy plunge of at least two

hundred and fifty feet into the foaming caldron under quick moving clouds of spray. The fall itself takes the appearance of one unbroken sheet of white satin, interspersed with myriads of shining drops; a fall of snow set full of jewels. The real depth of the chasm belittles all human efforts, from which rises such pearly mist, hiding from mortal eyes the secrets of its boiling heart. This fall is seldom equaled. Not all hight, like Yosemite, nor all breadth and power like Niagara and the Great Falls of the Missouri, but, to some extent, combines the three. It has excavated for itself a channel deep down in the primary rock, very much like Trenton Falls, of which I was somewhat reminded. Could these several falls be put together and made one, with an immense caldron for a body of water to fall into, as when the creek is high the resemblance would be good by changing the slate to granite. Trees of heavy foliage hang over the deep-worn chasm, some small ones on the sides of the precipice, driving their fibrous toes into every little crevice, and almost into the very rock, to obtain a scanty subsistence.

Perhaps the old Indian Chief Choshonee, after whom the falls were named, might, if he were living, give its earlier life, while he was taking vapor baths and smoking his pipe by its magic-toned mu-

sic. About twenty-five miles down the river, in a deep canyon, with volcanic walls three hundred feet high, there pours out through the side some distance from the bottom twenty or more large streams, some as large round as a common barrel, lashed into spray as they leap down jutting rocks at the bottom, forming a stream nearly a hundred feet wide—supposed to be the resurrection of the Mahlad River—which was buried while alive in the Comas plain fifty miles away.

Boise City, located at the head of navigation through the Columbia and Snake rivers, is the capital as well as the commercial metropolis of Idaho. It is a trading, not a mining town, in the level valley of Boise river—a valley fifty miles long by about six wide, with agricultural pretensions. It will grow wheat, barley, and all the variety of vegetables, enough to supply a large population. The broad, level, treeless streets, with their low warehouses, little cottages, log cabins and stage coaches, wagons, speculators, miners, farmers and Indians, reminds one of a border settlement, a kind of portable caravansary, not uncommon along the borders of civilization.

The principal mining centers and farming interests of Idaho are located within a hundred miles of Boise, which secures to it the monopoly of the general business of the territory.

Boise Basin, northeast ninety miles, is a mountain bowl twenty-five miles in diameter, and contains some good quartz-bearing ledges, but is principally known as one of the richest placer mining districts. This saucer-like basin seemed to have been the receptical for the shining gold, coming a long distance in all directions through the mountain ranges, which gave it unusual richness.

A few miles from here, in the mountains, is Idaho City, containing a large mining population, and the center of several rich quartz districts, with mills for the reduction of the ore, the cause and life of the settlement, giving to the place permanence and future prosperity. The richest lead mining district yet discovered in the territory is seventy-five miles southwest of Owyhee, itself a straggling town, or rather towns, among the mountain tops; but the district is extensive, and embraces some of the richest leads and many gulch mining districts. It has been more largely developed, being more accessible and the first discovered. The placers were worked out, but the place is so rich in quartz that she can afford to lose the other kind of mining. But few districts in any of the mountains are more wonderfully piled up and broken by subterranean fires than this, which, no doubt, is the cause of its unusually rich mountain mines.

Ruby City lies nearly in the bottom of a canyon, with overlooking mountain summits of one and two thousand feet. War Eagle stands sentinel over all these peaks, and is the richest, and in some respects the most wonderful deposit of ore yet discovered in all our mining country. This mountain, like the great Comstock Lode, in Nevada, will add millions of dollars to the world's treasure.

Large quartz mills are erected here, owned by companies in New York, Boston and Providence. The first mill, put in working order, cost seventy thousand dollars, and in less than its first fifty working days, yielded ninety thousand dollars in bullion.

The leads contain both gold and silver—usually, about one quarter silver. Mills that can work ore up to within twenty per cent. of what it will assay, is considered good work in any kind of ore. This ore is easily reduced; a single stamp will crush from two to two and a half tons per day. Some Chinamen find remunerative employment, by panning out the "tailings," after the mills have exhausted their skill to extract the gold from it. Many grinding processes and laboratory theories have been gotten up which worked wonders, when on exhibition in New York, but practically in the mines are worthless. Idaho machinery is from California. San Francisco-made quartz mills, a specialty from the first, are far

in advance in all improvements which are properly a success, of any made east of the mountains.

Here, as in all our large quartz regions, the larger portion of capital invested has been lost through incompetency, recklessness and bad management, by buying worthless mines at ruinous prices, and expending immense sums in the construction of mills, before ascertaining whether they had paying ore to justify the very heavy expenditure. The high hopes and golden dreams of very many good companies have been badly wrecked on these before unheeded and unguarded rocks in the mining business.

But enterprises, conducted with as much caution and careful judgment as is exercised in any other successful, legitimate business, will generally be largely rewarded. Quartz mining, however, has now only lived through a few of its infant years; but with its good start, will grow year by year, until it is one of the leading national interests, and holds out favorable inducements to the discriminating use of industry and capital.

The early history and discovery of gold in Idaho is that of Montana. Far away from civilization in unknown mountains—amid hostile Indians—the first prospectors pushed steadily forward, for many long and lonely months, after the first discovery of gold in 1862. After its richness was demonstrated, the

region labored under unusual disadvantages, being so very remote for all business purposes, and no mountain roads over which to transport machinery requisite for its development. But time, and the prospect of getting a "golden fleece," (although many went out after wool and came back shorn,) the obstacles have been overcome, and Idaho is one of our best mineral States; but can never be an agricultural region, on account of its remarkable unevenness and want of water for irrigation. But its grazing capacity is very good. Herds of cattle and sheep will find an abundance of nutritious grass at all seasons of the year. Though the winters are long, and sometimes severe, yet the average temperature is milder than that of Illinois. The climate is healthy, and softened by the milder breezes coming in from the Pacific, which is the case with much of the country lying west of the Rocky Mountains.

CHAPTER XXVI.

EASTERN OREGON — SOIL — CLIMATE — RESOURCES AND GENERAL FEATURES.

A day's stage-ride from Boise City, the tourist crosses the Snake River into Oregon, without noticing any remarkable change, save crossing the geographical line which the river makes a little more prominent, as it runs north through the rather beautiful, deep valley—forming a very natural, running boundary line between two great territories. As usual, we are among barren mountains, relieved occasionally by a growth of evergreen trees, upon their otherwise naked slopes; sand plains, with their usual productions; a few patches of bunch grass to the acre, with the usual presence of that indigenous, prolific shrub, wild sage. In the Blue Mountains, we crossed the Round Prairie, thirty miles by about thirteen, as level as a lake or a house floor, symmetrically enclosed by almost perpendicular, smooth mountain walls—the solid and beautiful masonry of Nature. It seems to be the bed of an old lake, reminding one of the rich, black loam of Iowa, unusual for the country, producing an abundance of excellent grass, good wheat and barley, and some of the

hardy vegetables, but too high and cold for corn. Near one side is a hot sulphur spring—a great boiling caldron, covering an acre.

Half a century ago, Lewis and Clark found and noted this interesting and beautiful, hid-away mountain oasis, while hunting for the head waters of the Columbia.

From a high cross range one can look back upon the extended, yellow-colored desert Valley of the Snake, for a hundred miles, and ahead to Walla Walla. Now upon the highest range of the Blue Mountains, we pass down on their Pacific slopes; the change is agreeable. Nature begins to put on an improved appearance; everything puts on a look fresher and newer than before. The deep mountains, whose evergreen forests revealed picturesque landscapes and the elements of more civilization, began to fix one's appetite for some almost indispensable common things elsewhere—of which, having been deprived, were unusually agreeable, especially that which makes near neighbors of the outer and inner world, the newspaper.

"We may live without poetry, music or books;
We may live without conscience, and live without heart
We may live without friends, we may live without books,
But civilized man cannot live without cooks."

We cross the head of the Umatela River Valley, whose head-waters and southern tributaries flow

though a delightful country, suitable for cultivation or grazing. Here were the famous pastures of the Nez Perce Indian chief, whose band of horses numbered sometimes two thousand head.

Down among the foot-hills, signs of better life and cultivation increase—become more apparent to the Walla Walla Valley, where the settler can gather about his humble home beauty and fertility. This is a large and productive valley, and is now quite largely populated with a healthy farming interest. Wheat, barley, oats, corn, fruit and vegetables, grow largely.

The town of Walla Walla, at the head of navigation on the Columbia, is a place of commercial importance—it being the principal supplying place of Eastern Oregon, Northern Idaho, and the eastern part of Washington Territory. Besides, it is in the centre of an excellent grazing country, where grass and water are abundant, with a climate dry and healthful; short winters and long summers.

Eastern Oregon embraces all that portion of Oregon lying east of the Cascade Mountains, known in California as the Sierra Nevada, and was for a long time supposed to be a desert country, unblessed in any essential way for the use of civilized man. More particularly so, when the emigration to this far off land came over-land from the old States and Ter-

ritories, in the far off east and more southern States, arrived at the South Pass of the Rocky Mountains with animals more than half exhausted and inefficient supplies, to enter upon a country more rugged and inhospitable—against which, from the ignorance of the country, they had failed to prepare themselves. They found now more obstacles to be overcome—a different climate from any they had ever experienced—agreeable in summer in the mountains, but excessively hot and dry on the plains.

The little coolness in the air in the morning atmosphere, soon gave way as the sun mounted higher and still higher—the heat increasing in intensity, until the great plain palpitated with radiated heat, and the horizon flickered almost like a flame—when the burning heavens met the equally burning earth. Their road often led them long distances over bare rocks, reflecting the heat of a cloudless sky—over hot, burning sands, and unusually heavy for their teams—over alkali deserts, which they knew not how to avoid. They would, of necessity, become somewhat disheartened by long and weary travel, and the unforeseen difficulties which fell in their way, quite unprepared to appreciate even the occasional oasis which beautified the desert, and imparted new life to them and their faithful animals.

My heart rejoiced many times to see the poor,

almost famished oxen, after traveling with heavy loads a long summer day, and often longer, to find one of these God-giving places. Their appreciative thankfulness, with eyes dancing in their sockets, literally laughing all over, I could understand more fully the request of the great Webster, when he ordered his man to drive his oxen up that he might see their honest faces once more before he died; so that when they had set foot within the ever beautiful verdant valleys west of the Cascade Mountains, the brown-colored hills and forbidding plains now of Idaho and Eastern Oregon were remembered only as "that God-forsaken country."

However, some emigrants were intelligent enough to observe as they passed evidences of extensive mineral deposits, but never looked forward to seeing this region, in their estimation, occupied, and its mineral wealth filling up the treasury of the world; and, least of all, did they foresee that some of this unblessed country would ever be what can now be seen in many of its fertile valleys, "blossoming like the rose." Such is Eastern Oregon. However, there is a very great disproportion between the good and bad land in this portion of the State. There are many mountain ranges—alkali plains, that would make better soap than wheat and sage deserts. There is no hope for the alkali, but

some of the sage land can be reclaimed where there is water, and made somewhat productive. Eastern Oregon, Eastern Washington and Idaho have the same general aspect of country. The northerly portions are heavily timbered, but below the 47th parallel and between the Cascade Mountains and the divide of the Rocky Mountains, the country is made up of mountain ridges, high rolling plains mostly destitute of timber, and table lands, where lakes and marshes may sometimes be found. But a small part of this great region can ever be made productive, for the want of irrigation, but is valuable for stock-raising purposes.

The Blue Mountains cross Eastern Oregon obliquely, and form the water-shed between the waters which flow into the Columbia and those which flow east into the lakes, of which the Kalamath is the largest. These several lakes, with their surroundings, are somewhat remarkable. Hills thrown carelessly around in all directions, covered with desperately burnt rock and scoria, the hideous chasms, sharp, pyramidal, needle-shaped rocks of its basaltic mountains, its mysterious reservoirs of water, its lakes of salt and hot springs in the midst of alkali plains, seem to fix it for a country uninhabitable by civilized man, and the home of the fowl, and the marauding Indians after a successful raid into the

distant settlements. Explorations already made are sufficient to demonstate the fact that Eastern Oregon, like Idaho and Montana, contains a mineral wealth of gold, silver, copper, lead, cinnabar and plumbago, which will give it prominence and a coming prosperity.

Notwithstanding human life, through all this isolated great country, is like a gambler's money—mighty uncertain—the hard, uncomfortable way of travel, the deprivations and sleepless nights; yet there seems to be an indescribable something, I must confess, that attaches one to it, invites the sunburnt, and sometimes from broadcloth to buckskin traveler, to prolong his, perhaps, already too long wanderings. It is not difficult for one who has spent some time in any of these mountain regions, to realize the reluctance with which old mountain men leave this kind of uncivilized life.

Once at Walla Walla, the past is only of memory, and the ready and willing steamer is ready to take you on down the Columbia,

"Through forest dark, and mountains rent in twain,"

to the bosom of its great mother, the ocean, whose blue waves have rolled in for unnumbered centuries to welcome this savage yet magnificent river. It extends its long arms northerly to British America, and far up in the Rocky Mountains through Idaho;

also it gathers up the northern waters of Nevada and Utah. The Owyhee, the Boise, the Payette, the Salmon and the Clearwater are all tributaries of the southern branch, the Snake.

Wallulee, situate a little below the junction, is beautifully located, and is a place of commercial importance, where mining outfits are procured and large supply trains leave for the distant mines. Should the business of the upper country increase, as there is every reason to believe it must, the place will grow large and prosperous.

The banks of the Columbia here are low, having the same general appearance, running through a great sandy plain. Nothing is in sight from the steamer's deck but expanded rolling plains, with scattered bunch grass. Back a dozen miles or more timber is visible, and farther back in the mountains heavy forest is in abundance for lumbering purposes. For sixty miles of the ninety down to the rapids, not a single tree is visible, except such shrubs as grow on the sand bars and islands.

Not far above Celilo (the head of the rapids) comes in the Des Chutes River, rapid and wide at its entrance; also, twenty miles up, the John Day River comes in by a high-walled entrance, which quite hides its approach. After these large accessions, the Columbia assumes her great power down the

rapids. Above this point the smaller boats only can navigate. A railroad portage carries everything from here sixteen miles to Dalles, below the cataract. The river for some distance above Celilo is rapid and lashed to foam. A prominent feature here is an immense warehouse a thousand feet long, built upon an incline to accommodate boats at the different stages of the water. From here the hurry of the water is most desperate, like that above the great fall of Niagara. It dashes over towering rocks, driving itself into wild excitement. The rapidity of its flow for such a large body of water, compressed between high walls, seems to be, and no doubt is, rounded up in the middle of the channel, so that it appears to go down on either side.

Most of the distance the railroad is close along the river, in view of its rapids and whirlpools. The enormous sand drifts, ever changing with the summer winds, cause the Railroad Company much trouble and expense to remove, and is also annoying to travelers who desire to see the country. Men are constantly employed the whole distance to prevent the road from being buried alive by the desperate sand winds which drive during the summer over this upper country.

Dalles is a prosperous business town of impor tance on the Columbia, and has some pretensions of

becoming the terminus of a branch Pacific Railway. The country about Dalles has a remarkable wildness and singularity. You have all about evidences of that period when the country was one great field of molten rock and liquid fire; rocks burnt and worn by the elements into horizonal terraces or massive perpendicular columns and sharp-pointed peaks hewn and seamed in every direction. This is an interesting region; the worn basaltic rock makes impressions on the mind and memory of the beholder not soon forgotten.

The word *Dales* signifies thought, and was applied to this place by the early French voyagers to describe the narrow channel through which the river is forced at this place. From Dalles Bierstadt painted his "Mount Hood."

> "Upon Mount Hood I stood,
> And with rapt gaze explore
> The valley, and that patriot band
> Upon Columbia's shore."

The grand old mountain can be seen for a hundred miles along the river, rising from the backbone of the Cascade Range. This, like Vesuvius and Etna, has formed for itself a cone-shaped mountain on the top of the range, and has thrown up from its crater a wonderful pile of scoria, ashes and other debris piled mountain upon mountain. The northern side, that of the river, has large quantities of

never-melting snow, and in warm weather Hood River comes down cold from the melted snows of the mighty mountain. Its hight has been variously estimated from fourteen to fifteen thousand feet. It has been agitated by an occasional eruption simultaneously with earthquakes at San Francisco. Yet it stands the same old watch-tower now that it did many years ago when this strong, rapid, high-walled and low-walled river, fifty years ago, carried the yearly "brigade" of the Hudson Bay Company, bringing the annual accumulation of their hunting and trapping from the interior country and Canada. A few years later it looked down from its cloud-capped crest upon the Astor Expedition, suffering all but death itself while crossing the ranges under its long shadow in the cold and deep snows of the mountain ranges in winter. But twenty years ago, in its self-same majesty, it saw the yearly immigrations to Oregon arriving at Dalles, traveled, destitute and sick, late in the fall, slowly and anxiously passing down the river amid fearful rapids to the settlements. It also saw many boatmen and immigrants dashed to pieces in rapids and swallowed up in maddened whirlpools, with the feeble means they had to float over some of its inhospitable surface. These were among the hazards and uncertainties of pioneer life; but now the traveler can only dream of those early

times while he gazes from the deck of a fine steamer with every want fully supplied. Ascending the river from Dalles, the country becomes more rolling, but quite barren, to the low foot-hills of the Cascade Range, when the heavy forests (as in California on the same range,) are brought out, as there, in greatness and beauty—then the very mountains themselves—and when the Cascades are reached you are in the heart of the mountains.

The "Cascades" are several miles of rapids where the river forces itself through the very heart of the mountains. These are passed also by a railway portage. The river seems shut back here, forming a beautiful bay, with two small islands and heavily wooded shores. Little above this bay is a sunken forest a mile or two long and a half mile wide, mostly covered by the waters of the river. This would seem to be the resting place for the great waters before rushing headlong through and down the narrow gorge. These few miles of railway, located just above and along the struggling waters, furnish views seldom equaled anywhere. The hight and picturesque grandeur of the mountains above the rapids is so great, and one feels his littleness, (as in Yosemite, which we shall visit,) that any description we could give would be as nothing. It cannot be described—it can only be felt. Place half a dozen Highlands

of the noble Hudson together, raise the little shrubs to mighty trees, and you may begin the comparison. Seldom one can find in so short a distance more to challenge admiration and receive more completeness of impressions.

CHAPTER XXVII.

WESTERN OREGON—PORTLAND—WALLAMET RIVER AND VALLEY—ITS UNUSUAL PRODUCTIVENESS—HEAVY FORESTS—EXTENSIVE FISHERIES—CLIMATE AND SCENERY—COLUMBIA RIVER.

The mountains past the Oregon side of the Columbia for some distance gradually lower, are heavily wooded and more fertile, indicating the approach to the Valley of the Wallamet, while the shore on the Washington side is more abrupt and broken.

The old historical station of the Hudson Bay Company on the Washington side, Vancouver, is beautifully located, commanding a fine view of the river, mountains and country. It is the headquarters of the Military Department of Oregon.

A little distance below, on the opposite side, is the upper branch of the Wallamet River; while the lower or larger portion joins its noble flood farther down, embracing a fertile island of several miles in length, upon which the Hudson Bay Company's people established the first farming in Oregon. At the upper mouth of the stream, are a number of small islands, as if to keep back the clear and sparkling waters, causing them to take many devious ways, as if reluctant to come forth all at once, to join its grand-

er neighbor, and be recognized no more individually. These embowered islands, the distant river, valley and bluffs of the Wallamet at the south, and the backed up, heavily wooded mountains to the east, together with the snowy slopes of Hood and St. Helen, standing majestically, making a view of mingled beauty and sublimity. A very pleasant sail from here to Portland.

The city was in its infancy ordained to be called Boston, but the Maine man saved it from that fate, only by the tossing of a copper, which fell head up—that representing the allegiance of the Maine man to his native home.

Portland is yet young and simple-hearted—"feels its oats," but its dignity more—looks as if made for all the working days of the week, and is also considerably dressed up for Sundays. The streets are broad and level, tree-lined, with the very best, wide side-walks, which are almost indispensable here, on account of the excessive mud during the rainy season. The houses are well back from the road and streets, and have beautiful gardens, with lawns of most lovely, velvety grass. The city never gets out of the woods. To the west of it stretch very heavy forests. North of it to the Columbia, are miles of dense wilderness. East, on the opposite side of the river, are also mighty woods; while south, along the

Wallamet for many miles, are large trees marshaled up the hill side and overtopped in the gorges, and absorbing the very sunlight in their stately masses; while those near the road seem bending down to the very roadside to see who comes so quietly over the smooth, sandy road, into their ancient solitude.

Portland lies in the real heart of Western Oregon. The almost inaccessible Cascade Mountain ranges, running north and south, form a very natural division of Oregon, making an Eastern and Western Territory. That portion of the State west of the mountains, is embraced in three large valleys—the Wallamet, Umpqua, and the Rouge River, together with a narrow strip of land lying on the coast, with the Columbia River for a northern boundary. The Coast Mountains and the Cascades, quite inaccessible on the east, make of necessity a geographical division of the State.

The territory lying between these two ranges, is divided by three transverse mountain ranges separating the valleys, of which the Wallamet is much the largest and most productive.

The Wallamet River, like most others of this country, is troubled with falls. Twenty-five miles from its mouth are falls furnishing the largest water power in the State. Above the falls, the water forms a large basin, and is smooth until within a half-mile of

the falls, when it quickly comes together, rapidly increases its momentum until in great haste it turns back upon its self-forming turbulent eddies, until driven forward it makes a last desperate plunge of twenty-five feet into a maddened whirlpool. The spray dashed up, forms a beautiful rainbow, and also cools the hot air of summer at Oregon City—on the rocky bluff at this place.

This interrupted navigation of the river has been mostly overcome by the Boat Company, and the portage is easily made. The company excavated a canal and basin along the east side, so that their boats come so near together that the passengers and freight have only to cross the warehouse to be transferred. The whole length of this river is not far from a hundred and seventy-five miles, and the extent of the valley is in the neighborhood of one hundred and twenty-five miles long, by from sixty to eighty in width, having many tributary streams.

Wallamet Valley is principally prairie land, waiting only the husbandman's plowshare and scattering the seed, to reward him liberally in large harvests. For several miles from the Columbia, the forests of fir, pine, yew and cedar, are very dense on the higher lands back; while the river bottom lands are covered with a large growth of oak, ash, maple, cottonwood and willow; but farther southward the timber

becomes less, and goes back into the foot-hills and mountains, until the country opens out in large and beautiful rolling prairies. Not like the immense flat plains of Illinois, but more like the undulating "oak openings" of Wisconsin. Low ranges of hills divide it, covered thinly with oak, low and spreading like those in Sacramento Valley and at Achapulco, trunks glowed in orange and green limbs, having a long, gray, hanging moss swinging in the summer wind, as if celebrating the mildness and beauty of the country. The soil is of a dark gray color; calcarious, sandy loam; is mellow, and ordinarily suffers but little from drouth; is especially adapted to cereals, and grows vegetables and the hardy fruits, but not so largely as the more alluvial soil formed along the rivers and streams. These prairies furnish grass in abundance for hay, but not in such quantity or quality as the lower lands of the rivers and streams. But grass is everywhere to be found more or less away from the heavy timber, and that when cleared makes the very best grass land of the country.

The general formation of the country govern men in their selection of agricultural pursuits. The grain farmer will settle in the valleys, while the fruit-grower will go to the low foot-hills, and the sheep-raiser will go higher up among the hills with his sheep to the mountains. The dairyman seeks those places

where grass is the most abundant during the year, and where the climate favors most the making of butter and cheese. As already intimated, Western Oregon—lying between the Cascade Mountains and the coast range—is one general valley, containing as much good farming land as would make a State of the size of Connecticut, besides two other valleys, having a large amount of good agricultural land, and a greater proportion of mountains, but superior for grazing and fruit-growing; while the lower valley has some of California's reputation for mining.

No one can travel through Wallamet Valley without being impressed with its varied beauty and almost wonderful fertility. Some have pronounced it the most beautiful valley in America. This is claiming too much for it; yet it can be placed among the largest and best, of which our extended country has so many. The beauty of this is made up in agreeable intermixture of level and rolling prairies, with ranges of low hills, pictured with heavy green forests, many gliding, winding rivers skirted with the finest trees, and in the majesty of the mountains which guard it from the heat of eastern deserts, and the cold of the Arctic seas. Its fertility and beauty is manifested in the magnificent forests which embellish all the surrounding hills in everlasting green; also in the grassy plain which year after year clothe

the valley with renewed, beautiful verdure, and also in the many waving, golden harvest fields which are now interspersed among the universal green. Nature is prolific. The soil and climate invite labor with almost a sure promise of reward, on account of the uniformity of the seasons by which the maturing of crops become a certainty. The production of wheat must, as it has been, be one of the principal productions of the State. Oregon "has the largest compact body of good wheat land on the Pacific slope, which, surrounded and intermingled with never-failing water power, makes the Wallamet Valley adapted by nature for the cheap manufacture of breadstuffs."

While Western Oregon is so prolific in agricultural productions, yet its timber and lumbering resources are equally as much so. The principal timber used for lumber are the firs and cedars. These grow beside the streams and on the mountain ranges, affording excellent facilities for milling and for exporting lumber. Along the Columbia river from Dalles to its mouth, a distance of two hundred miles, are dense forests of very large trees which make the best of lumber. Much of it finds a market in San Francisco and the Sandwich Islands.

No finer fisheries are to be found than here. From the highest mountain torrent, filled with delicious

speckled trout, to the largest rivers and the ocean bays, all its waters are quite alive with fish. The ocean bays furnish cod, sturgeon, carp, flounders, perch, herring, crabs and oysters. All the rivers along the coast furnish salmon—the largest are taken in Columbia.

They ascend the river twice a year—in May and October. My presence among the Indians did not interrupt their fine and abundant fishery. An enormous basket was fastened to a projecting rock, and the finest fish of the Columbia, as if by fascination, cast themselves by dozens into the snare. Seven or eight times during the day it was examined, and each time was found to contain two hundred and fifty salmon. The Indians, meanwhile, were seen on every projecting rock, piercing the fish with the greatest dexterity.

They who do not know this Territory, may accuse me of exaggeration when I affirm, that it would be as easy to count the pebbles so profusely scattered on the shores, as to sum up the different kinds of fish which this western river furnishes for man's support; as the buffalo of the north, and the deer from north to east of the mountains, furnish daily food for the inhabitants of those regions, so do these fish supply the wants of the western tribes.

One may form some idea of the quantity of sal-

mon and other fish, by remarking the time they ascend the rivers. All the tribes inhabiting the shores choose favorable locations; and not only do they find nutriment during the season, but, if diligent, they dry, and also pulverize and mix with oil, a sufficient quantity for the rest of the year. Incalculable shoals of salmon ascend to the river's source and there die in shallow water. Great quantities of trout and carp follow them, and regale themselves on the spawn deposited by the salmon in holes and still water.

The following year the young salmon descend to the sea, and I have been told (I cannot vouch for the authenticity) that they never return until the fourth year. Six different species are found in the Columbia.

" What is yon object which attracts the eye
Of the observing traveler who ascends
Columbia's waters, when the summer sky
In one soft tint calm nature's clothing blends,
As glittering in the sunbeam down it floats,
'Till some vile vulture on its carcass gloats.

'Tis a poor salmon, which a short time past,
With thousands of her finny sisters came,
By instinct taught, to seek and find at last
The place that gave her birth; there to remain
'Till nature's offices had been discharged,
And fry from out the ova had emerged.

Her winter spent amongst the sheltered bays
Of the salt sea, where numerous fish of pray,
With appetite keen, the number of her days
Would soon have put an end to, could but they
Have caught her; but, as they could not, she,
Spring having come, resolved to quit the sea.

And moving with the shoal along the bay, at length
She reached the outlet of her native river;
There tarried for a little to recruit her strength,
So tried of late by cold and stormy weather,
Sporting in gambols o'er the banks and sands,
Chasing the tiny fish frequenting there in bands.

But ah! how little thought this simple fish
The toils and perils she was yet to suffer,
The chance she ran of serving as a dish
For hungry white man or for Indian's supper,
Of enemies which the stream abounds,
When lo! she's by fisher's net surrounded.

Partly conscious of her approaching end,
She darts with meteoric swiftness to and fro,
Striking the frail meshes within which she's penned,
Which bids defiance to her stoutest blow.
To smaller compass by degrees the snare is drawn,
When with a leap she clears it and is gone.

Once more at large with her companions, now
Becoming more cautious from her late escape,
She keeps in deeper water, and thinks how
Foolish she was to get in such a scrape,
As mounting further up the stream, she vies
With other fish, in catching gnats and flies.

And as she on her way did thus enjoy
Life's fleeting moments, there arose a panic
Amongst the stragglers, who at length deploy
Around their elder leaders quick as magic;
While she, unconscious of the untimely rout,
Was by a hungry otter singled out.

Vigorous was the chase—on the marked victim shot
Through the clear water, while in quick pursuit
Followed her amphibious foe, who scarce had got
Near enough to grasp her, when with turns acute,
And leaps and revolutions, she so tried the otter,
He gave up the hunt with merely having bit her.

Scarce had she recovered from her weakness, when
An ancient eagle of the bald-head kind,
Winging his dreary way to'ards some lone glen,
Where was her nest, with four plump eaglets lined,
Espied the fish, which he judged quite a treat,
And just the morsel for his little ones to eat.

And sailing in spiral circles o'er the spot
Where lay his pray, then hovering for a time
To take his wary aim, he stooped and caught
His booty, which he carried to a lofty tree,
Upon whose topmost branches he first adjusted
His awkward load ere with his claws he crushed it.

'Ill is the wind that blows no person good;'
So said the adage, and as luck would have it,
A huge gray eagle out in search of food,
Who just had whet his hunger with a rabbit,
Attacked the other, and the pair together
In deadly combat fell into the river.

Our friend, of course, made off when she'd done falling,
Some sixty yards, and well indeed she might,
For ne'er, perhaps, a fish got such a mauling
Since Adam's time, or went up such a hight
Into the air and come down helter-skelter,
As did this poor production of melter.

All this, with many other dangers, she survived,
Too manifold in this short space to mention;
So we'll suppose her to have now arrived
Safe at the Falls, without much more detention
Than one could look for, where so many liked her
Company, and so many Indians spiked her.

And here a mighty barrrier stops her way,
The tranquil water finding in its course
Itself beset with rising rocks, which lay
As though they said, 'return ye to your source,'
Bursts with indignation, fury, from its bondage, now
Rushes in foaming torrents to the chasm below.

The persevering fish then at the foot arises,
Laboring with redoubled vigor, 'mid the surging tide,
And finding by her strength she vainly strives
To overcome the flood, though o'er and o'er she tried,
Her tail takes in her mouth, and bending like a bow,
That's to full compass drawn, aloft herself doth throw.

And springing in the air, as would a silver wand,
That blended end to end, and upwards cast,
Headlong she falls amid the showering waters, and
Gasping for breath, against the rocks is dashed.
Again, again she vaults—again she tries,
And in one last and feeble effort—dies."

Our space will not allow of a detailed account of the very large variety of articles which this valley is capable of producing. All the grains grow and produce abundantly, never yet having failed, and are of the best quality. The same is true of such fruits as apples, pears, plums, cherries, currants, and all the varieties of berries.

The prospector has discovered in Western Oregon gold, silver, copper, iron, lead and coal in reasonable quantities, and although this country is especially adapted to agricultural and pastoral pursuits, the present indications are that its mineral wealth makes it almost certain that the miner's pick, as well as the farmer's plough, must furnish the face of mother earth, west of the Cascade Mountains.

CLIMATE OF WESTERN OREGON.

The climate here has shown itself to be a healthy one during the long residence of some of the early

missionaries and settlers. There does not seem to be any natural causes for the encouragement of disease, if we except the tendency to rheumatic difficulties occasionally, as in San Francisco, which are caused by the cold winds from the ocean sweeping inland to the arid plains. These winds are a healthy provision of nature, and impart to the country a climate free from pestilential diseases; but it is necessary for those who have delicate constitutions, to protect themselves against the rapid change of temperature which is sometimes caused by the winds from the sea sweeping in suddenly, displacing the warm air of the valleys. However, with proper care to the manifest laws of health, the bodily man can hardly find a better climate for health and development. The nights are always cool, and sleep, "nature's sweet restorer," becomes a regular refreshment.

The winters are monotonous and somewhat disagreeable on account of the almost constant rain. The Californians call these Wallamet neighbors "web-footed," but we did not see the web; jetting at their lack of enterprise, meaning that the wet climate has made them aquatic, while they reply that they are solvent, and do not borrow money at two and three per cent. a month to buy champagne with.

The summers are delightful; the temperature of the day is agreeable, the air bright and clear; warmer in the after part of the day than in the morning, and falling again to coolness in the evening. Sultriness, such as we sometimes experience in our home country, is never found in these reigions. The greatest heat in summer never has that debilitating effect which the summer heat sometimes has in the Atlantic States. It was remarked by farmers here that their cattle can endure more work under the hot sun of summer, with less exhaustion, than they could in the States from which they came.

The climate of the coast country is more moist and cooler than the country lying back to the eastward, on account of its nearness to the sea. The soil is black and rick, (like that about Chicago,) supporting an immense growth of vegetation. The prairie places are covered with good grass; also the hillsides with a very heavy growth where the forests are not too heavy.

The temperature of the coast counties is lower than that of the interior, and is more uniform. The fogs from the sea in summer and the rains in winter serve to keep the grass in excellent condition the year round. With these natural favorable circumstances, together with some others, this would seem

to be the most favorable country for dairying—indeed, the best on the Pacific coast, as the valleys of the interior are the granaries.

Could some of our Herkimer County dairymen transfer their fine milking herds to these valleys and hills of perpetual green—one luxuriant pasture year after year—with their present knowledge of the business, it would be to them a promised land flowing with milk (if not honey). Truly they would find here a goodly heritage—no dreary winter one half the year to consume the products of the other half. Nature here in the coast counties is constantly renewing herself, and with proper industry and management (if a failure occurred it could not be charged to the account of the country) would constantly pour her treasures in the lap of the intelligent and industrious dairyman.

While we view with commendable pride the cities, villages and towns, growing great and prosperous, surrounded by liberal and generous fertility, supplying every want and luxury, we feel as though we would be rebuked should we leave Oregon, more especially the Wallamet Valley, without dropping a few thoughts in commemoration of the early emigration across the continent. Coming here, as they did, so far away from their friends and native land, in a country claimed and occupied (which is

nine-tenths of the law) by a foreign government, to take upon themselves the deprivations and dangers of the way and settlement, is unparalleled in the history of America, and, perhaps, in the world. Aside from any right we had to Oregon resting on discovery, exploration, cession and contiguity, actual possession of the country was needed to make that title indisputable. Nothing was complete without it, and this the early immigrants to Oregon settled in favor of the nation, in the presence of the rulers and subjects of a princess claiming to exercise, and exercised, a sovereign jurisdiction over the country, able to crush out the rising colony, either by force, or by refusing them such supplies in their destitute condition as were indispensable to their existence. They occupied the extraordinary and every way anomalous position of a people who, without having either renounced their country, or been renounced by it, were nevertheless without one.

We have already said all and more than we first intended to say of New England shores, but the mind runs unbridled, and we are dwelling with more than fond reverence upon the history of our pilgrim fathers, who established a State without a king, more lasting (we hope) than the rock upon which they disembarked. The heart of the philanthropist and patriot swells with just and honorable pride and

gratitude to a watchful and guiding Providence, as he reads the story of the settlement of Jamestown, and notices so many self-sacrifices, hardships and suffering endured with an unusual degree of the most heroic fortitude. But as memory picks up and binds together the exhausting journey of many months, dangers and perils, exposed to hostile Indian tribes over arid deserts and bleak mountains, I am compelled, as we stand here now and survey this beautiful and rich country, to express the opinion that all history, both ancient and modern, may be challenged to furnish an instance of colonization more replete with difficulties overcome, fraught with more discouragements sustained and submitted to, as those which characterize the settlement of the beautiful and productive valley of the Wallamet.

After several years of negotiations, which resulted in the final adjustment of the territorial controversy, to the neglect and injury of the settlers, a treaty was concluded and signed at Washington, June 15, 1846, and ratified at London, July 17, of the same year.

The appearance on the Columbia of the United States ship Stark, the same year, cheered the hearts of the settlers, and upon seeing the stars and stripes displayed, they were greeted by the spontaneous shouts of a people whose hearts were filled with a

thousand glorious recollections which clustered around and covered, as it seemed to them, the emblem of their now new country's nationality on the Pacific coast.

SCENERY.

Nowhere west of the Mississippi, can a country be found where the general scenery is so varied and magnificent as in Oregon. The massive Rocky Mountains to the east; the steeper slopes of the Cascade Mountain ranges in the centre, and the coast range on the west, covered far up their rugged sides with magnificent forests, while between them are rolling prairies, extensive plains and embowered lakes; unnumbered, long, wide and beautiful rich valleys, enhancing the appearance of grandeur and varied beauty; enhanced by the many magnificent rivers and mountain streams, which glide from mountain canyons and glens in every direction, bearing on their ceaseless flow the elements of prosperous commerce, productiveness and beauty.

When once upon the summit of the Cascade Mountains, thrown together in extraordinary confusion, the traveler's toil is repaid. "In one view he may embrace the rugged steeps of the Green Mountains; the blue, wooded slopes of the Alleghanies, and the ice-crowned peaks of the Alps; the volcanic piles of the Andes; the broad platteau of Brazil; the fertile

prairies of the Upper Mississippi, and the lawns, groves and copses of the sunny South. To the eastward he beholds an immense platteau or elevated plain, relieved at distant intervals by spurs from the mountain chains, and sloping gently in different directions towards the various streams which, wending their way through mountain gorges to the ocean, or to some silent lake, drain the eastern portion of the State. To the west he surveys a country diversified by great rivers and small streamlets; by tall mountains and deeply embosomed vales; by gentle undulations and precipitous, high-walled canyons; by dark-frowning forests of pine and fir, spruce and cedar, which the eye fails to penetrate; and natural gardens, all carpeted over with luxuriant grasses, redolent with odors of wild flowers, and full of the music of winged choristers."

This chain of mountains has so many large streams rushing over precipitous cliffs, leaping from fall to fall, and dashing and foaming over rocky beds—hence the characteristic name—Cascade.

Many curious formations are found in the tops of the Rocky and Cascade Mountains, remarkable lakes, (you will recollect we mentioned one while ascending Mount Lincoln,) small mountains of cinders, as if fresh from the volcanic forge, sea shells and corals. One of these Mountain Lakes is thus described by a gentleman who visited it:

"Upon rising the slope bounding the lake, the first impression made upon your mind is one of disappointment—it does not come up to your expectations, but this is only momentary. A second look, and you begin to comprehend the majestic beauties of the scenery spread out before you, and you sit down on the brink of the precipice, and feast your eyes on the remarkable grandeur. Your thoughts wander back thousands of years to the time when, where now is a placid sheet of water there was a lake of fire, throwing its cinders and ashes in every direction. The whole surroundings prove this lake to be the crater of an extinct volcano. The appearance of the water in the basin, as seen from the top of the mountain, is that of a vast circular sheet of canvass, upon which some painter had been exercising his art. The color of the water is blue, but in very many different shades, and, like the colors in variegated silk, continually changing. Now, a spot will be dark blue, almost approaching black; in the next moment it will change to a very pale blue, and it is continually changing from one shade to another.

"I cannot account for this changeableness, as the sky was perfectly clear, and it could not have been caused by any shadows. There was, however, a gentle breeze, which caused a ripple of the waters; this may account for it. At first sight, a person would

not estimate the surface of the water to be more than two or three hundred feet below the summit of the surrounding bluffs, and it is only after a steady look almost perpendicularly down into the water, that you begin to comprehend the distance. In looking down into the lake, the vision seems to stop before reaching the bottom; and, to use a common expression, you have to look twice before reaching the bottom. Heretofore, it has been thought by those who have visited the lake, that it was impossible to get to the water; and this was also my impression at first sight, and I should have been contented to remain on the summit, and view its beauties from that point, without attempting to get to the water; but Sergeant Stearns and Mr. Ford, who, after gazing a while from the top, disappeared over the precipice, and in a few minutes were at the bottom near the water's edge, where no human being ever stood before. Their shouts induced Mr. Coats and myself to attempt the feat, which is in fact only perilous in imagination.

"A spring of water bursts out of the mountain near the top, on the side where we were, and by following down the channel which the water has made, a good footing may be established all the way down. In all probability, this is the only place in the whole circumference where the lake is accessible, although

Sergeant Stearns clambered around the lake for a short distance, and ascended to the summit by a different route from the one we descended—yet he does not think he could go down where he came up. The water in the lake is as clear as a crystal, and is about the same temperature as the well water in Rogue River Valley.

"We saw no fish of any kind, nor even insects in the water. The only thing we saw that indicated that there are fish in the lake was a kingfisher. In ascending, I measured the distance as well as I could, from point to point, by the eye, and conclude that it is from seven to eight hundred feet perpendicular, from the water to the summit of the bluff. The lake seems to be very nearly circular, and is from seven to eight miles in diameter; and, except at two or three points, the bluff is about the same altitude. Near the western shore of the lake is an island about one-half mile in diameter, upon which there is considerable timber growing. The island is not more than a quarter of a mile from the western shore of the lake, and its shape is a frustrum of a cone; the top seems to be depressed, and I think there is a small crater in the center of the island. I think a path could be made from the summit to the water's edge, at the western edge of the lake, for the formation seems to be entirely pomice stone at that point,

and to slope to the water's edge at a less angle than any other place around the lake. At this point a boat could be safely let down to the water by a rope.

"I do not know who first saw this lake, nor do I think it should be named after the discoverer. Sergeant Stearns and Peyton Ford are the first white men who ever reached its waters; and if named after any person, should be named after them. But as I do not believe a more majestic sheet of water is to be found upon the face of the globe, I propose the name 'Majesty.' It will be visited by thousands hereafter, and some person would do well to build upon its banks a house where visitors could be entertained, and to keep a boat upon its waters, that its beauties might be seen to a better advantage."

A railroad is now being built through the Wallamet Valley, called the Oregon Central. This road is intended to connect the Columbia River with San Francisco Bay, and will form a link in that other great line of railway which is so much needed, and which will soon be constructed, connecting Lake Superior and Puget Sound with that Bay. As Editors sometimes say, before going to press, I learned that this Northern Road is already begun, and that a few hundred men are now at work on the eastern end.

On account of Portland capital, the Oregon Central has been commenced at that place. But it will

not long be the Northern terminus—it is situated too far from the Columbia River. A point for the Oregon Central is naturally on the Columbia, where it will connect by ferriage with a road down the Cowelitiz Valley from Puget Sound, making an unbroken line of road through Washington, Oregon and California, to San Francisco.

The direction of the Oregon Central is as yet undecided, whether to take the road over the Calapooga, Umpaga and Siskiyon Mountains directly southward, and open up the other two large valleys in Oregon, or to commence and take it through an easy pass through the Cascade Mountains, and then south over a nearly level country to the head waters of the Sacramento. This would be the cheapest, and could be made to connect with the Union Pacific, while the other could take in its course some of the most desirable country in the State. Efforts are also being made to get a branch road from the Union Pacific to connect the upper Columbia at Dalles, Umatilla or Wallamet.

No part of our territory needs a railroad more than Montana and Idaho, which this road would give them, and they are willing to lend their material aid to any company to get easier communication with the outer world.

France, England and Spain had been looking for

the great "River of the West" for a hundred years. At the very time when Yankee enterprise was heading its little vessel through the white breakers at the mouth of the long sought river, Vancouver, at the head of an English exploring expedition, was scanning the coast not far away, declaring that there was no such river.

Lucky man was Captain Gray, of the ship Columbia, from Boston. His stout heart and adventurous character must have grown large with anticipation and dread as he ran for the "opening," and drove his vessel into the boisterous, rolling flood straight through the real channel and came out on the beautiful bay, twenty-five miles by six, which the river forms at its mouth, in 1792, the first keel which had ever plowed its waters. He ascended the river to the Cascades, and on his return found the British explorer, who had ascended the river one hundred miles to the place now bearing his name, Vancouver. This for many years was the principal post of the Hudson Bay Company, on the Pacific, where one of their ships arrived annually with their supplies, and took away the furs and whatever else was obtained during the year to be sent home. Thus began the commerce of our Western coast, which now whitens every sea.

This magnificent bay is encased by high hills, loaded

heavily with great forests, broken by projecting highlands, making other smaller bays through which ran streams, whose valleys were far away among the hills. At the farthest limit of vision to the east, through a dark ridge flowed down the wide and deep majestic river, whose emination and course was as yet a far away mystery; but it was evident, by the large quantity of water, that it drained an immense inland country.

With the foaming brakers behind, and smooth waters before him, he had nothing to do but to wonder and admire as he sailed the greatest river of the West one hundred and forty miles to the "Cascades." If he fully realized the importance of his discovery to the world, his heart must have distended with generous pride, and he a happy man, while he glided over the waters of the majestic river.

"The blue Columbia, sired by the eternal hills
And wedded with the sea,
O'er golden sands, tithes from a thousand rills,
Rolled in lone majesty.

Through deep ravine, through burning, barren plain,
Through wild and rocky strait,
Through forest dark and mountain rent in twain
Toward the sunset gate.

While curious eyes, keen with the lust of gold,
Caught not the informing gleam,
These mighty brakers age on age have rolled
To meet this mighty stream.

Age after age these noble hills have kept
The same majestic lines;
Age after age the horizon's edge been swept
By fringe of pointed pines.

Summers and winters circling came and went,
Bringing no change of scene;
Unresting, and unhastening, and unspent,
Dwelt nature here serene.

Till God's own time to plant of Freedom's seed,
In this secluded soil,
Deigned forever unto blood and greed,
But blessed to honest toil.

Be mine the dreams prophetic, shadowing forth
The things that yet shall be,
When through the gate the treasures of the North
Flow outward to the sea."

CHAPTER XXVIII.

THE LOUISIANA PURCHASE.

The Louisiana Purchase from Napoleon was made by President Jefferson in 1803, for fifteen millions of dollars. It included the present State of Louisiana and the entire country west of the Mississippi, between the Spanish possessions on the south and British America on the north, more than half of the present area of the United States. We had value received then; got more for our money than the recent purchase of Alaska. Comment is unnecessary.

Shortly after the purchase, in obedience to an act of Congress, the President sent Lewis and Clark, officers in the United States army, to explore the vast and unknown region which he had added to the now seemingly small republic. The principal purpose of the expedition was, however, to ascertain the possibility of a road across the continent, the inspection of the pioneer movement for a Pacific railway. They outfitted at the then little French town of St. Louis. Steadily, but slowly ascending the Missouri to its sources in the Rocky Mountains, they with much difficulty crossed the

ranges to the head waters of the Columbia and fol lowed it to the ocean. It was a remarkable undertaking at the time, full of the wildest romance and adventure over the then untrodden continent by white men. The little band were scouts of the grand army now after the "Golden Fleece," and the conquest of half a hemisphere—the army of civilization.

The adventurous explorers traveled along rivers in rafts, and in small boats of their own construction, sometimes propelled by sails, oars and towlines, and upon the land on horseback and on foot. They were the first white men to see the Great Falls of the Missouri and go through the gateways of the great mountains, and to discover and explore the great River of the West, pass all its whirlpools and rapids to its inhospitable entrance with the sea.

After an absence of over two years they once more returned to the place from whence they started, but not as they went out, neatly shaven and in broadcloth; they looked at themselves, and the inhabitants gazed at them, who had long been given up as dead; deceived at first sight by their clothing of skins and swarthy faces, supposing them to be the wildest of all the Indians. Rip Van Winkle's resurrection, both as to himself and his old neighbors, evaporates into thin air at the first warm

rays of the early morning sun, when compared with the wonderful achievement of these resurrected men from an unknown savage land.

Going out they made the distance from the mouth of the Missouri to the mouth of the Columbia, four thousand one hundred and thirty-four miles. They returned by a nearer route, shortening it to three thousand five hundred miles.

Clark was a Kentuckian, belonging to a family of the first settlers, whose familiarity with Indian warfare and character especially fitted him for this undertaking. He was the military director, while Lewis applied himself principally to scientific investigation. Subsequently Clark was made Brigadier General, Governor of Missouri Territory, and Superintendent of Indian Affairs under President Monroe. He held the last position until his death in St. Louis, in 1838.

Lewis was a native of Virginia, had been in the army, and afterwards Private Secretary to President Jefferson. In 1809 he was appointed Governor of Missouri Territory. He found that quiet life unendurable, and fell by his own hand at a Tennessee inn, at the early age of thirty-five.

The unflinching perseverance and daring of these explorers, sent forth in obedience to the first national instinct, which has now culminated in that

magnificent work, the Trans-Continental Railway, then excited the warm enthusiasm of their countrymen. The government recognized and appreciated their services by giving them important public offices, and Congress made large grants of public land to each.

It would seem right for an appreciative people who are ever ready to reward real merit and appreciate faithful service, to erect a suitable monument at some eligible point on the Pacific Railway, to perpetuate in a substantial way the first practical steps of this remarkable achievement. Their report describes the Great Falls of Missouri as being two thousand five hundred miles from St. Louis, within the limits of the territory, (now Montana,) just where it has since been found—a sublime spectacle, which, since the creation, has been lavishing its magnificence upon a desert unknown to civilization.

Lewis found the river three hundred yards wide, down among precipitous rocks, with the water falling eighty feet. On the north the current was broken by jutting rocks, and its spray rose in great snowy clouds arched with rainbows. The stream here is a series of descents in about thirteen miles of cascades and rapids, having a fall of three hundred and eighty feet. The upper fall is forty feet,

and extends across the river in a half-circle. It is picturesque and beautiful. At its base are several small falls of three and four yards, while the banks on either side close in and form a deep gorge a thousand feet below the barren plain. These very high walls of yellow sandstone give impressiveness to the swiftly falling stream. The enraged river dashes over the lower Great Falls, like Niagara, vailed in snowy foam. The abrupt banks, the dazzling interesting rainbows, together with the immense volume of water, will make these falls a favorite with tourists when good facilities are made to reach them.

CHAPTER XXIX.

INDIAN TRIBES, CHARACTER AND HABITS.

The reader will now have observed that we have made the two wings of our great Western country from the eastern central base of the Rocky Mountains, while it yet remains for us to return and take up our travel through the middle portion from where we diverged.

From the quiet way which we have journeyed over these regions, you may have supposed that all danger from within by the red man of the plains and mountains was averted, which is quite the reverse. The traveler on his tour through such a country has but little time to write. It is as much as he can well do to "look out for his scalp, and for something to eat." Impressions, however, of the strongest kind are indelibly made by the changing incidents of savage life, and a mind that can ruminate upon them will ever find abundant materials clinging to it for endless entertainment, and to write when he gets back, to unfold the web which the shuttle of the mind has woven with the thread of thought in the loom of memory over the soul, lifting the contemplative mind up to the Great Creator.

We have reserved what we think proper to say as to the natives, to be given together in a single chapter, rather than to give scattered items and incidents which present themselves to tourists frequently while in the land of these original inhabitants.

Much has been written of the North American Indian—perhaps too much—and while his defiant character, his wild, natural roving existence, and his unhappy fate have somewhat inspired the historian and the poet, his simple habits, desires and sentiments have had a charm for the philosopher. Yet, we believe, had Fennimore Cooper lived, and had the varied experience with these people of nature which some of his elder brothers have had, the world would have been saved a very large load of a little fact and a wonderful amount of fiction.

Subjects of far-fetched narrations, embellished with the most choice words and beautiful thoughts, often with words that breathe and thoughts that burn, after being stripped of such veneering and varnish, are very diminutive when seen and known in their own home. The far-fetched beauty and greatness evaporates in light mist. Thus it is with the Western Indians, when we go where they are, and almost live with them. While their simplicity excites our sympathy, the truth compels me to ask, What can

life mean to them? What are their joys and sorrows, their fears, hopes and ambitions? What real benefit are they to the world for being in it? All their desires seem to be centered in one, and that in a voracious appetite. He seems to know nothing but his stomach—to get all he can and devour it. The Indian judges all things by material results; and when he heeds the teachings of Christianity, it is to better his physical, rather than his spiritual condition, for of the latter he has a very feeble conception—only so far as he can better his animal existence. Hence, his attentiveness to the white man's preaching about his wonderful religion, while the Indian desired such a material Heaven, as he could imagine from his earthly experience. Heaven was to him a land of plenty; therefore, the most he could desire was to go where there would be none of his bodily wants unsupplied. This reasoning is natural; the body must be supplied by civilization, before the wants of the soul can be developed and appreciated, for it is the unchangeable law of Nature and of God. Into this error the Missionaries fell, who went early among the Indian tribes of the Mountains. They taught religion first, and every day matters of life afterward—and failure was the result.

My experiences with these people were both unpleasant and agreeable. A little unpleasant, and al-

so a little dangerous, when they came down upon us on the plains a few miles above Julesburg. The spectacle presented, as they came at full speed on horseback, painted, their long bushy hair flying straight out behind, with bedaubed faces, armed, brandishing their ready guns, and yelling in old Indian style—wild and hideous as it was possible for even Indians to look—was one which would strike with a palsy, at least, the inexperienced heart and arm. What could four poorly armed men, with one woman and two children (our coach load) do against a band of warriors like these in full fighting trim? They evidently intended to have headed us off, taking advantage of location; but they either did not get to their chosen place as soon as they intended, or we passed along the mountain faster than they calculated; for when they rose on the crest of the range, we had passed a little above them, so that they were obliged to follow us, and the race was one for life. In this case the race was truly with the swift, as they had the battle all on their side. We had six large, fine horses, fleet, fat and strong, with a good smooth road after passing the place where they designed to head us off. The race was short, but one of great speed. We gained an adobe residence about a mile and a half ahead, strongly fortified by an outer wall, where we were secure—not, however, as we

started, for one of the party was no more—a well-directed bullet from an Indian rifle went through his breast, and death was instantaneous. He was riding the telegraph operator's horse, in the rear of the stage, while the telegrapher was on the seat with the driver, wishing to send by him some business to Denver. The Indians came dashing down so suddenly, he not seeing them as soon as the eagle-eyed driver, who was on the constant lookout for them, was cut off from escape. This capture gave them a good suit of clothes, a fine horse, a rifle, two horse pistols and a full set of telegraph instruments.

We had seen on the opposite side of the Platte, during the previous day, several small parties of Indians back in the foot-hills, and at one place they dashed down, surrounded a freighter's oxen who had stopped close on the bank of the river and turned the cattle out to feed for noon, and hastily drove them back in the mountains, and left him alone with his wagons and yokes.

We continued on till we came to a small collection of men in the road, who informed us that the whole stage load coming east had been killed but a little while before. The Indians had secreted themselves in an abandoned station of the stage company, where they were not discovered until the fatal volley was fired, and the immortal spirits traveled to

another world. They denuded the bodies, scalped them, took the horses and such portions of the harness and coach trimmings as they wanted, and left all the rest lying on the ground.

We had a short consultation as to what was best to be done, and concluded to return back to the station six miles, and remain over night, which we did. Starting next morning, we had gone about five miles, when they came upon us. Had our stage arrived at their murderous place first, we would have been their victims instead of the other load, as they had chosen a place nearly where the two stages pass each other. We could not stand many scenes like this; yet I do not design to undertake to put upon paper such a gloomy, heart-sickening description. But the deep impressions made then and there, will live as long as those who beheld it, and will be thankful that it was not themselves. This is but one of the close chances of life, which travelers were constantly taking while journeying about the country at this time.

It is not my purpose to trouble the reader with any more narrow escapes of life, which were encountered during the two years and over, that I was in and about the country. Several times, the two-edged sword seemed to be suspended with a single hair over my head. Yet, thanks be to God who gave me

the victory, I escaped unscathed, and left the country with much stouter health than I had ever had before.

There is one element in Indian character which I am quite persuaded has been misunderstood or falsely represented; that is *heroism*. Instead of having a commendable patriotic courage, which demands of us respect, he has an unfeeling, savage, brutal, stoical insensibility, to confound which with commendable heroism would be to destroy the distinction between the civilized and the savage.

Would any one dignify with the name of heroism the conduct of the Spartan boy, who having stolen the fox, concealed it under his clothes till it ate into his body, rather than betray the theft. This is the kind of courage for which the Indian has received so much unmerited praise. They do not anywhere, from Mexico to the British Possessions, seem to have any of the better feelings of a common humanity, notwithstanding the many opportunities some of them have had. There are some few exceptions, but I speak of them generally. A person is among portions of the scattered tribes from the time he enters this far West country, more or less, till he leaves it. A few hang about every place where there is any chance to pick up a subsistence. They are friendly when not on the war path, and a person

takes no risk meeting or being with them. Ever begging, ever hungry, self is all the world and all there is of it to him. We have sometimes thought that if he had been where a certain other individual was, he would have swallowed the whale instead of the whale swallowing him.

My acquaintance and observation while with several tribes of these children of nature, has been such as to cause me not to yield implicitly to the exaggerations of romance, and those traits which the license of song has assumed, will, in most instances, disappear before the scrutiny of real unbiased investigation. The savage-like Falstaff is by nature a coward; also treacherous, cruel and filthy. To show fear is to sharpen his appetite for blood. A determined coolness confounds and awes him when anything will. He will never stand up before determined courage, and never make an attack unless he has a decided advantage in position, Bradock-like, and usually in numbers. The inhuman masacre in 1847 of Dr. Whitman, wife and children, together with many others, at the Waiilatput Mission, now in Northern Idaho, is but one of many heartrending bloody tragedies which the faithful missionaries have suffered while endeavoring to give them the principles of a better life. We have selected Dr. Whitman's case as a sp[illegible].men only for what has

been re-enacted so often from early time to the present.

This devout and faithful disciple, together with his amiable wife, had labored with these natives, and been a father and mother to them for eleven long years, and the very ones they had taken in the Mission, and almost into the family, when the dreadful time came were among the first brutes to dip their hands in the blood of their benefactors. Doubtless, the reader remembers the horrible tragedy enacted at this mission, together with others in Northern Oregon about this time. There seemed to be a combination among the tribes to drive or exterminate the whites from their country, as they claimed. A detailed narration of the horrors of the Waiilatput massacre, together with the individual sufferings of the captives whose lives were saved, would fill a volume as large as this.

It is my purpose to give these people only a passing notice, and to give a few characteristic features as they impressed themselves upon my mind, and then leave them. As to the Indians' moral nature, that is nearly alike everywhere, with few exceptions; all are cruel and treacherous. His gospel is literally the "gospel of blood." An eye for an eye, and a tooth for a tooth." Vengeance is his first commandment, and indeed so is the Christian's whole decalogue,

"Under the general name of Blackfeet are comprehended several tribes, such as the Surcies, the Pigeons, the Blood Indians, and the Gros Ventries of the Prairies, who roam about the southern branches of the Yellow Stone and Missouri Rivers, together with some other tribes further north. The bands infesting the Wind River Mountains, and the country adjacent, at the time we are treating, were Gros Ventres of the Prairies, which are not to be confounded with the Gros Ventres of the Missouri, who keep about the lower part of the river, and are friendly to the white men. This hostile band keeps about the head waters of the Missouri, and numbers about nine hundred fighting men. Once in the course of two or three years they abandon their usual abodes and make a visit to the Arapahoes of the Arkansas. Their route lies either through the Crow country and the Black Hills, or through the lands of the Nez Perces, Flatheads, Bannacks and Shoshonees. As they enjoy their favorite state of hostility with all these tribes, their expeditions are prone to be conducted in the most lawless and predatory style; nor do they hesitate to extend their maraudings to any party of white men they meet with, following their trail, hovering about their camps, waylaying and dogging the caravans of the free traders and murdering the solitary trapper.

The consequences are frequent and desperate fights between them and the mountaineers in the wild defiles and fastnesses of the Rocky Mountains. Such were the Blackfeet, nor has their disposition changed but very little at this day, as many Montana miners know to their sorrow.

While in the Middle Park, Colorado, there where encamped on the head waters of the Colorado a tribe of Utes, between five and six hundred, where were

> " Mongrels, puppies, whelps and hounds,
> And curs of low degree,"

who are quite peaceful and long suffering towards the whites; consequently I could go among and be with them with safety and freedom.

I had the satisfaction to witness here one of those mysterious exhibitions of a " medicine man" over one of his dying brothers. Their first prescriptions are roots and herbs, of which they have quite a variety of species, and when these have failed their last resort is "medicine" or mystery. These professional gentlemen are of the highest order in their tribes, and some acquire skill in the medicinal world and large honors in their nation. In this case the old Indian was rapidly approaching his final end, and was nearly expiring, when the great "medicine man" appears in his strange and wonderful dress,

INDIAN MEDICINE MAN.

conjured up and fabricated during many life times of practice, and is the wildest and most fantastic that can be imagined, in which he envelops himself and makes his last visit to his dying patient, performing over and about him a numberless amount of charms in a mysterious way. But it was the decree of the Great Spirit that his patient should die, and it was beyond his mysterious efforts to save him, although he was supposed to know everything from the "Cedar of Lebanon to the hissop upon the wall."

To make a "medicine man" or doctor is very much alike in most tribes, and to qualify him to be a son of Esculapeus and practice his profession, he must take the discipline of their medical college, which is similar to some preachers in making a convert. A general camp meeting is held for several nights, during which are various performances, such as dancing, hopping, screaching, incantations, extreme bodily exercises and nervous excitement, sufficient to make many patients instead of a doctor. The constitution of the native is a strong one, and is capable of great physical endurance. Ultimately, however, one or more are overcome with superhuman power which enters into him at that time, and instead of making him a saint, he is only a superstitious or mysterious Indian doctor. He

is not yet fully qualified; he must attend many courses of lectures, go through many mysterious performances before he is graduated and allowed to heal the sick, to prophesy, dream dreams, and give victory to his people.

In that great characteristic of all ancient and modern civilization in which other barbarians have not been so deficient, brave as he might be in battle, skillful as he might be in the chase, stoical as he might be under the most cruel torture, he will impose upon his squaw (wife) the most menial services; would give her censure, and sometimes blows, instead of acts of assistance and words of affection. Those tribes that had been long since favored with a sprinkling of civilization seem to have not profited in the least as it regards the treatment of their females, all slaves. The fabulous stories of civilization had not changed their simple hearts in this regard. The Indian by nature is lordly and tyrannical in his treatment of women, often beating them unmercifully, and sometimes those not of their own household.

The tourist, through any of the tribes over the country, will often see these degraded females packed with all their worldly effects, (and perhaps some of the younger members of the family also) upon her back when moving, while her great lord

and Indian master, unencumbered, save his gun or bow and arrows, walks as proudly as one having a little brief authority and monarch of all he surveyed. One would suppose that the Indian husband, when judged by the high and humane standard of Christianity, is to his wife like an island with a stream of cold water flowing around him—not a part of the main land of domestic happiness. The Indian's lordliness and oppression to their females I am persuaded is not caused from the want of native affection, but from legendary habit. They seem to think it right, as a matter of course, having never known differently. They never can be made to paddle their Indian canoe kindly on that stream which runs sleepless night and day, gliding through the beautiful reclining meadow of a higher, intelligent, Christianized domestic life, such as is expressed in the folowing stanzas:

Thou art on my bosom sleeping,
Gentle, trusting wife of mine;
And mine eyes are fondly keeping
Love's unwavering watch o'er thine!
Hushed shall be my very breath,
While thy dear heart slumbereth.

Sleepest thou as slept in Eden,
Slept in beauty holy Eve—
Ere her soul with grief was laden—
Ere her bosom could deceive;
Wife! may thou thus ever be—
Grief and guile unknown to thee.

Clasped upon thy gentle bosom,
  Now thy white hands gently rest,
Even as leaves around the blossom
  Of a slumb'ring rose are prest;
Blossom of my life thou art—
Thine, dear love, a rose-bud heart.

Round thy neck my arm is wreathing—
  Softly to thy lips I bow;
And the perfume of thy breathing
  Plays upon my bending brow.
Gentle wife! that fragrance breathes,
From the sweetness of thy soul.

CHAPTER XXX.

INDIANS MAKE A RAID ON THE ROAD—A WEEK AT ELKHORN STATION—THE HUNTER AND TRAPPER—INCIDENTS IN HIS LIFE.

As usual, the Indians had made a dash on the road the first of the season—in June, 1867—and more desperate than any before. The line was broken up for sixty miles ahead, the stations burned, the stage stock drawn off, and all killed that did not make their escape. We were obliged to remain a week at a stage station near old Fort Hallack, in the northern part of Colorado, before a sufficient number of men were collected to undertake an advance.

The Stage Company employ, through this out of the way portion of the road, hunters whose business it is to furnish meat for a certain number of stations. They are either hired, or sell the meat by the pound to them. Where we stopped, "Elkhorn Station," was one of these hunters, by the name of Anderson, who furnished within himself a good specimen, the very material of which the heroes of the wilderness, mountains, traps and hunts, are made. Like Kit Carson, all bone and muscle—a kind of grayhound constitution. He was one of those who had trapped and hunted about and over the country for many years,

and could not, or would not live away from the wild life in the mountains.

He was one of those few survivors of that somewhat mysterious class of old mountaineers which traveled in our imaginations more than reality; who are walking cyclopedias of almost mysterious escapes and exciting adventures—unbound volumes of travel, incident and romance. Buffalo hunts; desperate encounters with grizzly bears; remarkable wanderings among the mountains when lost; without food; miraculous endurance and hardships; hand to hand wounds in deadly fights with Indians—but he even had been captured after so many hairbreadth escapes from outward enemies.

He, like many others of the kind, had been susceptible to the charms of these dusky beauties of mountains and plains, had set up for himself a *wieky-up*, as a family man. This is the only authority acknowledged by an old mountaineer. She usually controlled in the lodge, (log house now,) regardless of her lord's bluster outside. He was the traveler's American Fur Company, and I took great pleasure in visiting his cabin, as he had a retentive memory, could relate the most interesting portions of his mountain life—while we at the East roamed the country in imagination, only as that great country beyond the West where the fur trader went for his

peltry, and the home of the adventurous trapper and Indians.

When meat was needed, he would take his horses—one to ride, and the other with a hunter's pack-saddle, so made that quarters of meat could be hung upon it—and go far away in the mountains for elk and antelope, and never return without meat.

I asked him how it was possible for him to escape the Indians? He said he always traveled on high ground, on the ridges, that he could better see his game and enemies; never allowed himself to be ambushed, and that the red-skins had long since learned, that to attack an old hunter, where he had a chance, was sure death to some of their number. A true mountain-man, he said, repudiated fear; he would fight, even against superior numbers, for the Indians had both fear and respect for a man who had determined courage—who asked no quarter, and would neither give it to others. "Why," said he, "I once made over a hundred of the brave Blackfoot Indians run." "How could that be possible?" I asked. "It was a year when the coppered devils were unusually hostile, and took the top of the head off of every white man they could catch. When out hunting on a fleet horse, I suddenly came upon a war party of them. I turned and ran, *and they all chased me!*"

Trappers usually go to the head of streams, far up

in the mountains early in the fall, where they begin their trapping, and descend the stream as the weather becomes colder, and finally winter in the valley.

There are three kinds of trappers. The genuine free trapper regards himself as superior to the other two. He owned his own horses, traps, arms and ammunition, and all the appliances appertaining to the business. He took whatever route he thought offered the best success; hunted and trapped wherever he pleased; traded with whoever offered highest prices for his furs; dressed gaily in the style of the country; moved in the first society, and occasionally one of this highest order of nobility had been lucky enough to spring his trap and catch an Indian wife. Should the free trapper have a wife, she went with the camp to which he attached himself, furnished with one of the best horses, elegantly equipped (in their style) and dressed in the best goods the country afforded—unusually ornamented with beads, red ribbons, buckskin fringes and feathers. She was truly Fifth Avenue society, both in her own estimation, and also in the eyes of her tribe, and saved her from that slavish drudgery to which she would have been subjected, had she been the wife of an Indian.

Another class of free trappers, who were furnished with their outfit by the company for whom they trapped, were obliged to agree to a certain stipula-

ted price for their furs, before the trapping and hunting commenced. The hired trapper by a company was regularly indentured—bound to hunt and trap faithfully for his employers, and to do anything else required of him in the field and camp—to do every duty—a man servant.

I had a curiosity to know what was done with the peltry while they were trapping and moving long distances over the country. Where a sufficient amount has been obtained, a pit is dug in the ground six or seven feet deep; then a drift is made at the bottom under the solid earth, where a room is excavated of sufficient size to hold the furs, in which they are placed, and the apartment is closed up; then the hole is filled with earth, and all traces of digging removed. These catches are the only store-house of the hunter.

Having to remain here at the station so long, I took especial care to make the acquaintance of the hunter—now my friend; but who prided himself, most of all, on having been a "mountain man," and in relating the most striking incidents of his hunting and trapping life, from Mexico to British America, and the Mississippi to the Pacific. The daring and reckless side of a story, is the only one dwelt upon in narrating his and other's hardships and daring deeds, and narrow escapes of life, which he is

now ready to declare was only so much pastime. He did not, in his romantic and interesting narrations—extending over many years in these then distant and lawless wilds—attempt to disguise the fact, that he had done as a mountain man, "those things which he ought not to have done, and left undone those things which he ought to have done."

Upon examining my notes taken at the time, with the aid of memory, a few incidents in the history of this kind of life will be given, to "tell the tale as 'twas told to me." After a camp is organized, and is on the march, a military discipline is observed; a leader is chosen, known as a "Booshway," whose business it is to take the supervision—look after the condition of the whole camp; who goes in advance of the column. Near him is a led mule, of known speed and trustworthiness; he is the portable office of the company; carries the books, papers and the agreements with their men. Then follow the pack animals, each bearing three packs, snugly fastened, so as not to slip in traveling. These are in charge of men called camp-keepers.

The trappers and hunters have two horses or mules each—one to ride and the other to trap their traps. Should there be women or children in the caravan, they are all mounted. If the country is safe, the caravan moves carelessly, and sometimes scattered.

But should danger be apprehended, the whole party move in compact column, fully prepared to resist any attack which could be made against them. A "little Booshway," as he is called, brings up the rear of the party, whose business is to see to the order and condition of the camp, and that nothing is left behind on the way. When it is time to camp for the night the leader stops, and selects a space which is to be devoted to himself, in its center. The others, as fast as they arrive form a circle, the last man bringing up the rear to see that all are there. The animals are quickly unpacked and turned out to grass, being guarded, but when night approaches they are brought within the circle and picketed, by driving a stake in the ground, to which a rope is fastened. The men are then divided into messes, as in military camp. That part of camp business which consisted of eating was not one of very much complication, where the only article of food is meat raw, roasted or dried. At a specified time, all is quiet in camp, and the guard only is awake.

During the night, the officer of the guard gives the guard a challenge, "All's well!" which is answered by all, "All's well!" At daylight, after a horseman has galloped at a distance around the camp, to see if all is safe, the horses are turned out to feed, closely guarded; after which, they are driven up,

repacked, the men mounted, and the train again moves off in the usual order. In a winter encampment, the leader and the second man occupy about the same positions. Other regulations are observed.

The business of the trapper during the season of trapping is only to trap and look after his two horses, and when he returns at night he takes his beavers to the clerk, where they are counted and placed to his credit. The camp men take off the skins and prepare them for packing. While they are in camp there are six persons to each lodge, four trappers and two camp-keepers; consequently the trappers are well cared for, having but little to do aside from occasionally hunting for the camp. When the hunters return with a quantity of meat it is deposited in front of the Booshway's lodge, and the second man cuts it in pieces, or causes it to be done. When the men come they turn their backs to the pile, and the "smaller Booshway" takes a piece, and holding it up, asks: "Who will have this?" The man answering says, "Number ten," or fifteen, meaning his lodge. The number is then called to come for the meat. In this impartial blind way the meat is distributed, and it is a way which must be satisfactory to all.

A gun is never fired in camp under any circumstances short of an Indian attack. The guns are

regularly inspected, like those of a well regulated army, and any lack of care in this regard is followed by a fine, and is charged to the account of the careless camp-keeper.

When the camp breaks up in the spring, the skins used during the winter for lodges being thoroughly dried and smoked by lodge fires, they do not shrink by water like new hides, and are cut up and made into moccasins. This is an important condition, as trappers are very much in the water. A new hide would shrink after becoming dry, so that it would be useless for this purpose without being soaked each time after becoming dry. The trapper, for the same reason, is obliged to remove the bottom of his buckskin breeches and replace them with blanket leggings, which he wears during the trapping season.

Life in the Rocky Mountains at this time (1836) was one constant battle ground, and a rigid military discipline had to be constantly maintained. Constant vigilance all over the country was truly the price of life and property.

The frequent incidents of a trapper's life furnishes material which needs little embellishment to make interesting narrations, both to while away the winter evening in the camp, and to somewhat astonish the far away reader in his secure and happy home.

The winter rendezvous of the American Fur Company this winter was on the Yellow Stone River, where it makes a long turn to the south and east, enclosing a large prairie covered with good grass, having extensive cotton wood bottoms, a favorite place of the Company's to make their winter encampment. Our hunter made up one of this camp, and while out trapping with two others on one of the branches of the river, a somewhat interesting adventure befell the little party. Having killed a fat buffalo cow in the afternoon, they cut out the most choice parts, made a camp in a small grove, partook liberally of their meat, the remaining store of choice pieces were divided and placed, after the manner of hunters, under their heads, betaking themselves to their blanket couches for the night, while the snow was falling about and over them. Being now filled with the creature comfort, their ever ready gun beside them, no Indians or wild animals disturbed "nature's sweet restorer," sleep.

Our hero trapper was awakened about daylight by something walking over him heavily and snuffing about his head, with familiarity and a most insulting freedom. It was not long before his Yankee powers of guessing determined who the early morning intruder might be. It was disagreeably certain that an old grizzly bear, whose keen

BEAR TAKING MEAT FROM UNDER THE HEAD OF THE HUNTER.

senses had enabled him to discover the presence of fresh meat in that locality. "You may be sure," says Anderson, "that I kept very quiet while the bear helped himself to some of my buffalo meat and went a little way off to eat it. But," said he, "one of the men raised up and back came the bear. Down went our heads under the blankets, and I kept mine covered pretty snug while the beast took another walk over the bed, but finally went off again to some little distance. Mitchell then wanted to shoot, but I said, no! no! hold on or the brute will kill us sure! When the bear heard our voices, back he run again and jumped on the bed as before. I'd have been happy to have felt myself sinking ten feet under ground while that bear promenaded over and around us! However, he couldn't quite make out our style, and finally took fright and ran off down the mountain. Wanting to be revenged for his impudence, I went after him, and seeing a good chance, shot him dead. Then I took my turn of running over him awhile."

Anderson was with the American Fur Company another winter, when they went into winter camp on the Snake River, (now in Idaho,) which was one of the coldest he had ever experienced in the mountains. Fuel was difficult to obtain, and a supply of meat still more so. The buffalo had been driven in

the fall east of the mountains, and other game was scarce. Often a party of hunters would be out for days without finding any more meat than they needed for their own subsistence.

The trappers are all hunters when in winter rendezvous. On one of these hunting expeditions that winter, the party consisted of Anderson and three more hunters. They had been out more than a week without killing anything of consequence, and had ascended a mountain over frozen snow, hoping to find some mountain sheep. As they clambered along under a ledge of rocks, they came to a place where there were impressions on the snow of grizzly bear feet. On looking round they discovered an opening in the rocks, revealing a cavern, into which the tracks lead. (This, no doubt, was Candlemas Day.) The bear had come out of its winter home, made a short circle and returned. The hunters hesitated, knowing it was doubtful as to how it could be secured. After a short consultation one proposed to go on the rock above and shoot him, if any one would go in the cavern and drive it out.

"I'm your man," said Anderson.

"And I, too!" said another, while the third one declared himself as brave as the others and prepared to follow.

On entering the cave, which was sixteen or twenty

feet square, and high enough to stand erect in, instead of one, three bears were visible. They were standing, the largest one in the middle, with their eyes staring at the entrance, but quietly greeting the hunters only with a low growl.

Finding that there was a bear apiece to be disposed of, the hunters kept close to the wall and out of the stream of light from the entrance, while they advanced a little way cautiously towards their game, which, however, seemed to take no notice of them. After manœuvering a few minutes to get nearer, Anderson finally struck the large bear on the head with his wiping-stick, when it immediately moved off and ran out of the cave. As it came out the man on the ledge shot, but only wounded it, and it came rushing back, snorting and running around in a circle, till the well directed shots from all three killed it on the spot. Two more bears now remained to be disposed of. The successful shot put them in high spirits, and they began to hallo and laugh, striking the next largest bear; he also ran out, and was soon shot by the man outside.

By this time their guns were reloaded, the men growing more elated, and Claymore declaring they were "all Daniels in the lion's den, and no mistake." This and similar expressions he constantly vociferated while they drove out the third and smaller bear. As it

reached the cave's mouth three simultaneous shots put an end to the last one, when Anderson's excitement knew no bounds. "Daniel was a humbug," said he. "Daniel in the lions' den! Of course it was winter, and the lions were sucking their paws! Tell me no more of Daniel's exploits. We are as good Daniels as he ever dared to be. Hurrah for these Daniels!"

With these expressions, and playing many antics by way of rejoicing, the delighted Anderson finally danced himself out of the "lion's den," and set to work with the others to prepare for a return to camp.

Sleds were soon constructed out of the branches of the mountain willow, and on these light vehicles the fortunate find of bear meat was soon conveyed to the hungry camp below.

After this somewhat remarkable exploit our now established hunter, in language more strong than elegant, remarked that the Scripture Daniel was a very small affair as compared to himself and associates.

When the camp broke up in the spring they came down on Green River, trapping and hunting, and worked their way down through Utah to the Colorado River in the fall, where they remained during the trapping season, and then passed down

through Arazona to New Mexico and wintered on the Gila and the Rio Grande Rivers. In the spring they started north to trap on the head waters of the many streams in South and Middle Parks, Colorado.

While the camp was on its way, Kit Carson, Anderson and Mitchel, together with three Indian trappers, started on a hunt east of Rio Grande River. When they were about a hundred miles from camp, crossing an open country, a plain, they discovered a large band of Indians mounted, and coming towards them. They were in the Camanche country, and knew full well what to expect if taken prisoners. They took a hasty observation of their foes, and full two hundred Camanches, with their warriors in front, mounted on fleet horses, armed with spears and battle-axes, going like the wind over the prairie, their feather head-dresses flying back in the breeze, could be clearly seen in that clear air, imparting a thrill of fear mingled with admiration. The first moment, the look; the second, to devise some way of escape. To run was useless; their swift steeds would soon overtake them, and then there would be no hope. No protection was at hand; no woods or ravine as in the mountains. Carson exchanged a few words and said: "We must kill our mules!" There is a chance for life until the breath is out of the body, is the rule of true mountain men like these.

To the ground they sprang, placing their mules, seven of them, in a circle, cut their throats almost in an instant with their keen hunting knives, and held them in their places till each animal fell dead. Then hastily throwing up what dirt they could with their hands and knives, they made themselves a fort, —a hole for each man to stand in, with a dead mule for a breastwork. Soon the Camanches came up and made a dash on them, the great medicine man in advance, gesticulating and making a desperate noise with a little rattle which he shook violently. The whooping and brandishing of weapons, and the dash of the charge, was at least somewhat impressive.

But the little garrison in its mule fort was unusually mulish and did not waver; but the Camanche horses did. They could not be made to charge upon the bloody carcasses of the mules, nor near enough for them to throw a spear into the fortification.

This was just what the trappers had relied upon. They were determined, yet much excited by their remarkably exposed situation. It was arranged that but three should fire at a time, the other three reserving their fire till the empty guns could be reloaded. Each one was to select his man and kill at every shot. This they did. Their horses could not be urged upon the slaughtered mules. The three

whites fired first, and the medicine man and two other Camanches fell.

When a medicine man is killed the others retire, hold a council, and appoint another, for without their "medicine" they could not expect success in battle. The warriors retired, while their women came up and carried off the dead.

After devoting a little time to bewailing the departed, another chief was appointed to the head place, and another furious charge was made with the same results as before. Three more warriors bit the dust, while the spears of their brethren, attached to long hair ropes by which they could be withdrawn, fell short of reaching the men in the fort. Again and again the Camanches made a fruitless charge—losing, as often as they repeated it, three warriors, either dead or wounded. Three successive times that day, the head chief, or medicine-man, was killed; and when that happened, the heroes in the fort got a little time to breathe.

While the warriors held a council, the women took care of the wounded and slain. As the women approached the fort to carry off the fallen warriors, they mocked and reviled the little band of trappers, calling them "women" for fighting in a fort, and resorting to the usual Indian ridicule and gasconade. Occasionally, also, a warrior raced at full speed past

the fort, apparently to take observations. Thus the battle continued through the entire day.

It was terrible work for the trappers. The burning sun of the plains shone on them, scorching them to faintness. Their faces were begrimmed with powder and dust, their throats parched, and tongues swollen with thirst, and their whole frames aching from their cramped positions, as well as the excitement and fatigue of the battle.

But they dared not relax their vigilance for a moment. They were fighting for their lives, and they meant to win. At length the sun set on that bloody and wearisome day. Forty-two Camanches were killed, and several more wounded, for the charge had been repeated fifteen or twenty times.

The Indians drew off at nightfall to mourn over their dead and hold a council. By this time they must have realized that their medicines were not effective, and came to the conclusion that the trapper's medicine possessed wonderful killing properties! When sable night had spread its shadows over the embattled and now memorable mule-fort, the six heroes who had contended successfully against a hundred brave Camanches, took each his blanket and his gun, "thankful for the bridge that carried them safe over," they gave a hasty good-by to dead mules and packs, and started on their return to camp.

During many years of out-door life of toil, watchfulness and peril, the mountain trapper had acquired the habit, like the Indians, that when he had a journey to perform, or was going on express business, he would take a dog-trot, and travel all day in that gate.

On this occasion, the six escaping from a deadly enemy for life, ran all night, and found no water for seventy miles—when, ultimately, they came to a clear mountain stream, their thankfulness equalled their necessity—"for," says Anderson, "thirst is the greatest suffering I ever experienced. It is far worse than hunger or pain."

They remained here, rested and renewed their exhausted energies, and went on without hindrance, until they arrived at camp, in that beautiful spot in the Rocky Mountains, now called South Park; and here we leave them, glad to know that, after their remarkable escape with their lives and hardships, they are safely in this agreeably romantic spot in the mountains.

CHAPTER XXXI.

THE ROAD FROM CHEYENNE—CHURCH BUTE—UP AND OVER A WILDERNESS OF MOUNTAIN RANGES—UPON THE SUMMIT—DOWN THE PACIFIC SLOPE—REMARKABLE ROCK FORMATIONS—ECHO CANYON—WEBER VALLEY—MORMON SETTLEMENTS.

I am here; there is no mistake about that, with one of the very best prospects of my remaining for some time to come. Day after day, here, close under the high, broad mountains, among the child-hills about "Elkhorn Station," the battle was renewed, not with Indians, but with mosquitoes. It would seem that they had been whetting their needles on a smooth mountain peak hard by, anticipating our stay. Washington Irving informs us that a certain people in early time, on the Hudson River, all fell to smoking to hide their little settlement from Yankee depredations, and have them pass on without being discovered; in which they were successful, so completely did they envelop the town with the smoke of their large, well-filled pipes. When we enveloped ourselves in a cloud of smoke the enemy's forces would fall back, but as soon as our smoked forms came out to view, mountains that

rival Switzerland and skies of Italian beauty, the battle would be fought over again; perhaps more blood would be shed than before. The enemy's forces came on, like the Goths and Vandals, from the mountains in numbers which could not be overcome, when we would retreat in "good order" to the smudge. Remaining here was more troublesome than fighting Indians—at least in imagination, but a very little less dangerous.

Although we were obliged to remain here so long, and no escape, I was reminded of the time when Kansas was "bleeding" even unto death, and demanded of all good people a generous liberality. A large, good-looking man entered, as one having authority, a negro's barber shop in a certain place known as Kansas, to be shaved. After the barber had performed after the manner of the craft, the gentleman was about to leave, when he informed the barber that he was the Governor and would pay by the quarter.

"You bes Gob'ner ob Kansas?"

"Yes."

"Well, I'd rader dese gob'ners would pay by de shave, becase dey run off so mighty sudden."

Somewhat so with "mine host," or rather hostess; she thought we had better pay by the meal, and we had just two dollars less money every time we left

her bread and elk meat feast. These were the only articles that remained with us, like the mosquitoes, to the last. If her husband managed his affairs out doors as profitably, they must now be well set up in business.

After remaining here six days, a sufficient number was collected, with part of a company of United States Cavalry, to make an advance into the enemy's country. The army wagons being loaded with supplies for man and beast, with two stages, we packed our baggage hastily, (two blankets and a jack-knife,) and the young army went bravely forward, two days and one night, before passing the brake, without seeing the shadow of an Indian; but their works were manifested in various places in dead men and burnt stations. All the station-keepers and soldiers were massacred that did not escape. The men in two stations defended themselves in their log houses till night and then made their escape. Their board doors were perforated with bullet holes, like a skimmer, by the Indian rifles.

The difficulty past, we resume our journey from the Territory of Wyoming far up in the Rocky Mountains. Here are many interesting and quite remarkable earth and rock formations, arranged by time and the work of the natural elements into architectural grandeur; some quite beautiful. Church

Bute is an unhsapely mountain of bare gray earth, hundreds of feet high, covered partly with decomposed sandstone, while other portions present the appearance of a vast cathedral in all conditions of badly ruined greatness; solid and crumbling walls, small and large towers, smooth and sculptured pyramids, whole and broken; recesses holding sculptured figures. Time's pitiless elements have worked in this soft rock a wonderful variety of forms, both curious and interesting.

None of the accounts of travel seem fully to describe the many remarkable peculiarities of these mountains, (neither do I think they ever can be,) and those general characteristics which all mountainous regions have in common. At every turn in the road the tourist is introduced to new views equally strange and remarkable. No man's imagination can picture the piled-up magnificence and wildness that may be seen in traveling over this most desolate and yet most interesting portion of our continent; a panorama of grandeur and varied beauty such as pen and pencil can never reproduce. As we pass on up towards the more central ranges the nights grow very cold, while the day would be like an Italian summer. While passing over some of these ranges the cold was severe, when we could look down upon a sunny valley warm with genial

heat, and also look up to the eternal snows which crowned the neighboring mountain. High, rugged, naked mountains towered up on either side into a region where all, save the voice of the storm, is silent; where all is cold and desolate; where the higher slopes of the mountains are covered with the white mantle of perpetual snow, and cover their heads with the clouds. Their naked sides are covered with volcanic rocks, a substance resembling the slag formed in iron furnaces blasted out by subterraneous fires. At length we attained the most desolate part of the road. The hills seemed iron and the heavens brass; all those sources of utility and beauty which, from their being so generally diffused through liberal nature, are generally considered as things, of course were over this region omitted. The mountains on either side of the road presented a scene that had been cheered by the beauty of no vegetation since the waters of the deluge had subsided and the dove left the old patriarch's window not to return.

As we slowly ascended the dividing range the mountain ranges seemed to lower as we approached the summit, and when upon the divide, nine hundred feet above sea level, there were no ranges above us, but mountain peaks seemed to penetrate the clouds on either hand. Large fields of snow

came nearly to the wagon road, a few steps on either side. A party could take an old fashioned snow-balling in July. But of this youthful diversion we wanted but little here below, nor wanted that little long. We made a stop for some time on the very summit, to enjoy the extensive view, and see the melted snow run along the mountain on either side towards the two oceans. Two little rivulets rising within a few rods of each other, starting off towards the rising and the setting sun, begin their long journey in the eternal snows of the dividing range with which to feed both oceans. Amid the surrounding grand desolation there are elements of unusual interest and beauty; the piled-up magnificence of the wilderness of mountain ranges, with their many sentinel watch-towers overlooking and defending, with parental solicitude, the smaller and more dependent members of the great family; the cloudless sky, the clear, exhilarating and balmy air, bringing objects far remote near, while a few wild flowers were contending at our feet, under adverse circumstances, for a scanty subsistence. Altogether, the view presents unusual completeness of extent and varied majestic beauty unsurpassed. Many mountain peaks can be seen towering up into a region where all save the voice of the storm is silent; where all is ever cold and desolate; where they wrap around

them the white mantle of perpetual snow and cover their heads with the clouds. Many of these peaks are torn and furrowed to their center, and sometimes cleft asunder from top to bottom. What meditated thoughts come to us as we stand here and view these mountain summits! Century after century upon their naked heads has rested the closed hand of silence, unimpressible both to summer sunshine and rigid winter's strength.

We were fortunate to attain the Pass early in the forenoon, (one of those beautiful days in early summer of which this country has so many,) enabling us to fully enjoy the magnificent views—ample compensation for a long stage journey. To those accustomed to the heavy air of the low country, no correct judgment can be formed as to distance. We were permitted here to supply ourselves with late papers and magazines, they being thickly scattered upon the ground—a verification of the old saying, that there is no loss without gain. The stage had been attacked by Indians a short time before, a few miles from here; but they succeeded in gaining the summit, when their horses were exhausted, and they sloped, taking the mails and baggage, with which they made themselves a fort, and lay down in it. There being five of them, well armed with rifles, breach-loaders, they were able to make a good de-

fense. The Indians dare not come and take their chances with them, but crawled up the steepest part of the hill, near enough to shoot their arrows up, and have them drop into the little fortification; but they were harmless. The driver, however, was killed before gaining the place, and the superintendent of that division was on the seat with him, and at once took the lines, and thus saved the lives of the others.

As we pass on down the Pacific slope, the landscape presents a more changeable view. From the higher ranges could be seen mountain slopes of various hue, doffed with low bushy evergreen shrubs streaked with snow, almost hid in the distance amid fleecy clouds. But at length a few green valleys could be seen, and nature began to put on an increased wreath of vegetation, indicating our approach to the great basins and valleys of Utah.

Our road has for a few miles objects of interest, goes between two ranges of precipitous hills of soft sandstone formation, and presents some very interesting and curious shapes, which, when viewed in the distance, are remarkable imitations of magnificent works of art in ruins:

> "If thou wouldst view fair Melrose aright,
> Go visit it by the pale moonlight."

Soon after the great moon rose over the eastern

mountains, we came to the ruins. Here may be seen the old Cathedral and the Palace; there the new; some streets having on either side once magnificent blocks of buildings and lofty domes, sublime in their proportions, grand in the outline of architecture, an ancient city in ruins, with its walls, terraces, castles and magnificent porticos. Occasionally, an old column and a crumbling pedestal may be seen, as though long since abandoned by the owners, and the work let to the destroying hand of time, to be taken down into an unsystematic mass of ruins; also, a remarkable variety of monuments and statuary, of humanity and animals. No place can be found having a greater variety of the kind, or of more magnificence. Over and through these remarkable imitations of departed greatness, as one is compelled to imagine them, where

> "Distance lends enchantment to the view,
> And robes the mountains in its azure hue."

It reminds one forcibly of some of the once great cities of the Old World, which are now amongst the rubbish of the past. It was with some difficulty that we could divest our mind that these were not the hard work of human hands, and no one left to tell the passing traveler the story of their former greatness or present ruin. We pass mountain ranges, low divides; cross and go down the beds of departed riv-

ers, with rough and smooth walls, sometimes one and two thousand feet high, through Echo Canyon.

This deep, narrow opening through the mountain is about twenty miles in length, and is in some places arched by overhanging small trees and rocks. This canyon has many very striking features like the Cascades of Oregon, which would amply repay the traveler to incommode himself to visit.

The many Mormon fortifications, now in a bad state of preservation, on the bluffs and in caverns on the sides of the mountains, remind the traveler of the time when Johnson's army was marching on the Sainted City. The Mormons fortified this deep canyon to give battle to their invaders—a Gibraltar of defense in and of itself.

We enter a productive valley, dotted with cultivated fields and greensward, having a clear, beautiful river, where the comforts of civilization were present. The contrast was unusually agreeable, having been so long away from such pleasant indications of our home life.

The country through which we have passed, although grand and majestic to look upon, is almost a barren land, save wild sage and cactus, the naked mountains, dreary ashen hills of earth, immense wastes, white with alkali, the ground parched and gullied, a country more varied but as barren as the

deserts of Sahara. Dropping down here from the mountains, we found a Mormon dignitary surrounded with many blessings, (not in disguise.) Some of them were living and moving, while others were the wealth of a productive soil. We soon had unmistakable evidence of the latter—the first truly "square meal," without even the edges taken off, for two weeks. His youngest, black-eyed and black-haired wife, done the honors of the table, equally well as we done honor to her bountiful repast.

The driver informed us that his churchship was very destitute just then; some of his former helpmeets had left him, and he could then boast of but three. From his cheerfulness, I thought he classed them among such blessings as brighten when they leave.

A Mormon farming community are settled along the valley, giving evidences of an humble prosperity on their farms, while their little one-story adobe houses show unmistakable evidences of that kind which the good elderly lady had, who it is said once lived in a *Shoe!* Beyond is a larger house; a richer man lives there; three doors to his residence. He is favored with three wives only; where the man can afford it, each wife has her separate apartment. Still further on, is one still more wealthy; he has a large story-and-a-half adobe house, where he lives

with but one of his wives—two small one-story square adobe houses on either side of him—a wife and family in each. He has only five wives.

Through the country, one can generally tell if these lords of the plough have more than one wife, by such indications. These men must be *Saints*, or they could never control so many wives, when we often find it difficult, and sometimes even dangerous, to control even one.

The afternoon ride in the valley is remarkably interesting. At evening, we cross a very high range into another valley and canyon, when in the early morning we ascend another long hill and stop, get out and survey the country before us.

In the very bosom of the mountains, at our feet is an extensive and beautiful valley, one of the most picturesque in the mountains. The gently flowing, sparkling waters of the modern Jordan, making towards the great lake, are before us, more precious than all the waters of old Demascus to these people. Many other flashing streams are coming from their hiding places far away in the mountains, to contribute their wealth of beauty and fertility to the valley. As far as the vision can extend, north and south, stretched the green valley, spotted with fields of grain, fruit and gardens, with herds of horses and cattle, and its skimming lakes, bounded ultimately by a wall of

mountain. The valley is bounded on either side with lofty mountain slopes, green at the base, then gray, their highest summits white with eternal snow, combining in one matchless view summer and winter, the sunny skies of Italy, and the frozen snows of Switzerland. We look down upon a peculiar people, and a city equally peculiar, different in more ways than one from any other in our wide and broad land. A stranger standing here would, on looking down upon the City of Great Salt Lake, ask at once what peculiar people live here. The unusual public erections and cloistered homes of church dignitaries, would readily excite his curiosity. The city from here offers both a beautiful and a romantic view, built by a people whose history there is the romance of remarkable fanaticism, and the romance of suffering; while you are indignant over their assumption of religion, you are in admiration and astonishment over their industry.

On the gentle slope of the mountain, upon a large area of table-land before us, is the mountain home of a now large and beautiful city. The streets are four miles in length—run east and west, north and south. They are each eight rods wide, and are perfectly straight each way. On either side of every street runs a stream of the purest mountain water, and rows and double-rows of a variety of shade trees

are growing luxuriantly along every water-course. To stand here and look down upon the many sparkling rivulets running in all directions along the streets, it would seem some of them were runing up hill; but nevertheless they are hastily gliding through every street in the town. The city is laid out so as to have just ten acres in each square, and these are sub-divided into eight squares, so as to give one and one quarter acre to each house. These little home lots are all made into gardens, full of trees bearing a large variety of fruits, such as apples, pears, peaches, two and three varieties of plums, apricots and cherries, and under the heavy growth of trees are planted all the common varieties of vegetables growing in perfection under their shade. Should the garden plot be in the urban part of the city, just over the fence from the enclosure is nothing but parched, barren sand and the ever present shade, and his own now beautiful and fruitful grounds were the same four years before. Every garden is watered as required by a small stream turned from the street on the higher part of the lot. The abundant and constant supply of water makes a very heavy vegetable growth.

Among this dense shrubbery is the environed dwelling house, made of adobe brick, i. e., clay unburnt. The bricks are four times larger than our

common brick, and are of gray color. The houses are mostly one story high and present a comfortable appearance.

In one of these ten acre squares rises up a remarkable building, oval in shape, and covered with one glittering metalic dome two hundred and seventy-one feet long, one hundred and seventy feet wide and seventy feet high. This entire area has not a single inner support; is one unbroken space. This immense building is the new Tabernacle—the church. This lot is enclosed by a heavy wall of masonry, and is entered on two sides through heavy double gates, and has but two erections. The other building in the enclosure is the unfinished Temple.

We also look down upon another walled-in ten acre lot on the opposite side of the street, where the autocrat, not of all the Russias, but of all the chosen "Latterday Saints," resides with his numerous family of both great and small. Here is the Lyon House, so named from having that animal in bronze over the entrance; also the Beehive House, (the Mormon emblem of industry.) These are rather blocks of buildings. In this enclosure, as in all the Church Tithes buildings and the school house of Brigham Young, no children are permitted to attend it but his own. Here Brigham Young's ambition "climbs his little ladder," and Mormon genius "plumes his half-fledged wings."

The school register bore the names of fifty odd pupils, all his own sons and daughters; but there were not over thirty present, all looking as healthy, bright and intelligent as any other school I ever visited. Children seem indigenous here; they are in the houses and on the streets, and you wonder, till you recollect that they are the only growth of the soil—without irrigation.

Along the business streets these acre and a quarter squares are still divided, and the streets present rows of compact buildings like any other city.

We have given but a few of the most prominent features of this center of Mormonism—a city and a people unlike any other in some regards in the world. The city has a population of about twenty thousand, Mormons and "Gentiles," as they call everybody who are not of their faith.

As we stand overlooking the city and the extended sweep of country, under the yellow skies, in the soft, hazy atmosphere covering everything in "robes of azure hue," we can't but feel that we are in a goodly heritage, a visioned land, as the Saints claim it to be. It truly is; after coming from dreary, barren mountains and naked deserts, from unusual natural poverty so long, we stand here on the eastern range, high above the valley, and view the most beautiful spot on which the sun ever shone. Thus

it seemed to us. We ask ourself, can this be the desert which only three years ago was a twin-sister to that just described, full of alkali, salt, sand and wild sage—all poverty. We are ready to ask, what master mind established, laid out this city of the desert, and made it the mountain Eden what it is at this time. But as we look away over the country we learn that this is only *one* among many evidences of the workings of a shrewd master mind. We discover one hundred and thirty cities and villages planted among the mountain valleys, four hundred miles to the southward and two hundred in the opposite way, and in all about one hundred thousand people.

The estimated amount of expenditure for canals, aqueducts and small water courses is ten millions, five hundred and eighty-eight thousand dollars. Ninety four thousand acres are cultivated by irrigation. giving to the government, or rather Brigham Young, an annual water rentage of two hundred and seventy thousand dollars.

Nothing can be raised in Utah without constant and careful irrigation. With it everything is grown in abundance. The use of water as a fertilizer is much greater than we in this land of showers have comprehended. For thousands of years irrigation has made the country along the river Nile the garden of the world.

To supply Salt Lake City with an abundance of water they went back in the snowy mountain ranges a distance of forty miles, dug a canal, with lateral ditches, making in all nearly a thousand miles of water course concentrating in a small river before arriving at the city. But during the time of irrigation, after the parched earth has been supplied, you go below the city and see the little brook which seems to say: "I am what is left of the great mountain stream after the city has drank all that it wants." Wherever a mountain stream can be found they bring it down in the valley, and is made the means of a settlement. After water is available the rest is easy; build a cayote house, which one man can do in a day, then set up housekeeping and begin farming. A cayote house is a small cellar dug in the ground with a few boards placed up over the hole as a roof. The now poor farmer occupies this until his farm (never to exceed forty acres by their law) enables him to build one of adobe brick.

There is through all this country a horizontal rather than a perpendicular agriculture adapted to irrigation. There is no place on our continent where such extensive works of irrigation have been made and in use as those in the Great Salt Lake Basin, by an isolated and an outcast people. Here are at least in all one hundred and twenty thousand

people, who not only live themselves, but export largely their agricultural produce, which is sustained by irrigation alone.

Wherever a watered valley can be found in Utah, (the name of an Indian tribe, meaning those who dwell in the mountains,) and there are many creeping up among the mountains a long, long way, there you will find the humble, industrious, uncomplaining Mormon settler, earning a living in the way most congenial to his nature by cultivating the soil. All of them are plain; most of them are extremely so, as might be expected in a very humble people. They bear the impress of poverty, hard work and poor living from their youth up. Yet, as a people, they have no doubt bettered their condition physically, if not mentally, by coming here.

Here is a community gathered from almost the uttermost parts of the earth, mostly foreigners, from the lowest, most ignorant strata of society in Europe. They are from England, Norway, Sweden, and many from Denmark, and a few of our own people, cemented together, presenting a very good outward fusion, making them seemingly united, differing from all other people in government, domestic life and religion. These industrious and economical conglomerated people have taken from the most forbidding frowns of forbidding nature a country

and converted it into fruitful fields, filling homes with plenty and gladness.

The summer here is about eight months long, and dry; the winters are mild and open; the fall of snow is light in the valleys and heavy in the mountains.

This, like all the mountain country, is one of the healthiest that can be found. In such an atmosphere lung and throat diseases have no chance. Sad experience has shown the folly of sending consumptives to the tropics. The invigorating air of high, dry regions, away from salt water, has proven to be the most healthful.

Salt Lake City is on the commercial line across the continent, and holds a future in it. The invalid and the pleasure seeker can now pack their trunks, step aboard the cars, and in a few days arrive for a season at this mountain Saratoga, with pleasure, and if in pursuit of health, with profit. The hot Mineral Springs here have much curative virtue. The bathing is delicious, invigorating, cleansing and softening the skin to the texture of a child, and is said to be a sure cure for rheumatic cripples, and a restorative for scrofula and consumptive diseases.

You see here several of these hot springs boiling up like a heated reservoir; one spouting up a column of boiling water as large round as a man's body; some moderately warm and less active, while others

are cool, but all of the same chemical composition. An analysis of the water gives the following result:—Carbonate of lime, per oxide of iron, lime, chlorine, soda, magnesia and sulphuric acid. It is slightly charged with hydro-sulphuric acid gas and with carbonic acid gas, and is a mineral water having valuable properties belonging to Saline Sulphur Springs; usual temperature 102° Fah.; sulphur predominating, like the spring at Sharon and Richfield, but less odorous. The sulphurous smell and great clouds of steam and mist rising, with a back-ground of purple mountains, would have been declared by the ancients as the very largest mouth of Tartarus.

Salt Lake valley has its own system of rivers and lakes, different in some respects from any other.

"The entire great Utah Basin, is divided by small ranges of mountains about two thousand feet high, forming valleys from ten to fifteen miles across. They slope imperceptibly toward the centre, where a water course runs to some adjacent valley, or into some marshy place.

One well known portion of this region is the noted Death Valley, so called from the fact, that in 1850, a large train of emigrants en route to California, became discontented with their Mormon guide, and a portion of them decided to pilot for themselves.

After traveling three days they reached the val-

ley, which is some fifty miles long by thirty in breadth, lower than the sea level, and entirely destitute of water, encircled by mountains, up whose steep sides it is impossible to ascend except at two points. It is devoid of vegetation, and the shadow of a bird or wild beast never darkens its white, glaring sand.

The little band of emigrants, comprising twenty families, were deceived by a treacherous mirage that promised water; but on reaching the centre of this vale of desolation, their eyes rested only on the glaring sands bounded by the scorched peaks. Around the valley they wandered. One by one the men died, and the panting flocks stretched themselves in death under the burning sun. Can any one question the appropriateness of the name ever since applied to it—the Valley of Death?

In marked contrast to this dreaded region, is the beautiful Valley of the Virgin, nestling in the Black Ridge range at the southern ridge of the Great Basin of Utah. The encircling mountains rise to an elevation of twelve hundred feet, with numerous peaks passing above the limit of perpetual snow. From their summit you look down upon a vast extent of country, with its hillsides and valleys, plains and glens; while the Virgin River is seen rounding its course along the foot of the range many miles–

now overflowing a valley, here gliding beneath over hanging cliffs, leaping from rock to rock, and then in grand cascades rolling off granite ledges in sheets of feathery foam, on its way to join the Colorado. In the dim vista appear rugged peaks rising tumultuously heavenward, tinted by the sunshine that streams through the mighty ravines and hollows, filling them with lines of silvery light and purple shade.

A large portion of the Black Ridge range consists of bare rock, but there are districts covered with soil and a good growth of pine trees. There are several passes in the range; the best, called the Harmony, leading to St. George, the chief town of Southern Utah. The climate is so mild and genial, that the fig, olive, grape and cotton thrive. The hottest season is from the middle of June to July, when the thermometer ranges from 95 to 120 degrees at noon. Frost lasts from November to March; but snow is rare, and ice never exceeds a thin film.

Beyond the enchanting valley are the remarkable mud volcanoes, located below the sea level in the Colorado desert; and if the waters of the ocean could break the intervening mountain barriers, they would be lost to sight. They are situated in a most desolate country, covering a space of a quarter of a mile long and an eighth wide. This area is one mass of soft mud, through which steam and water are con

stantly escaping, making a noise that can be heard ten miles; and rising vapor forms clouds that are visible at a greater distance. In some places the steam rises steadily with a hissing, roaring, sputtering noise; in other spots it bursts out with an explosion, throwing the mud a hundred feet into the air.

There are places where the mud rises in huge bubbles, and bursts as if boiling with intense heat; while in other portions regular cones, varying in shape from sharp points to little mounds, have been formed. There are boiling springs which eject their water fifty feet high; others are merely large basins several hundred feet across, in which a lead-colored paste is continually boiling. Their margins are encircled by incrustations and arborescent concretions of lime and deposits of sulphur. They are well worth a visit, though an excursion to them is attended by serious hardships.

Another object of note are the Summit Soda Springs, situated seven miles south of the line of the Central Pacific Railroad in Summit Valley, between Lake Tahoe and Donner Lake. With the exception of the Yosemite, there is not in all the Sierra Nevada a spot of wilder magnificence or beauty.

The road that leads to them runs through a continuous succession of natural beauties of forests, glades, streamlets and mountains.

The springs are near the head waters of the American River, one of the most beautiful of mountain streams, that forms a series of cascades near the source. The lofty peaks of the Sierra loom up in all directions, divided by precipitous canyons, which shelter dense forests of lofty evergreens. The mineral water is most agreeable and apetizing, possessing great medicinal virtues in the cure of affections of the digestive organs. The springs can be reached without fatigue by invalids; and the rough log cabin, now the only house, will be replaced this season by a neat hotel, erected by the railroad company. The marvelous beauties of this wild region will make it the future Saratoga of the Pacific."

The little mountain ocean—"Salt Lake"—is what the Indians call Medicine, or Mystery, has elements peculiar to itself. It is sixty miles long, by from twenty to thirty wide—has no outlet; but two large rivers, the Jordan and Bear, flowing into it, together with many other large mountain streams, which, during the rainy season, causes the lake to rise several feet, but the power of evaporation and absorption soon establishes an equilibrium between the loss and supply of waters in this country. This is the highest large body of salt water in the world, is very transparent, excessively salt, and forms one of the most concentrated brines known. No animal or vegeta-

ble life can be found in it. Everything in the water is incrusted with salt—the want of vegetable matter for food must necessarily exclude all kinds of animated life. Everything about the lake is largely covered with salt. It is crystalized from the spray of the waters, and is found abundantly on its shores, on twigs and shrubs.

The shores in the summer season, where shallow, are incrusted in pure salt suitable for table use, and shallow arms of the lake present beds of clean salt for miles. Some places have large, deep beds of salt, where it can be taken up by the wagon load for use. The water is so buoyant, that if a person assumes a sitting position, he will not sink below the shoulders. Swimming in it is difficult, on account of keeping the lighter parts of the body in the water.

I never left a place more reluctantly—could have spent days of investigation upon the fascinating, transparent water of this remarkable lake, with both profit and pleasure. There is one other body of water in the world like this—the climate and country somewhat similar. Go with me to Bible land, where was once the renowned cities of Sodom and Gomorah, hid forever from human vision—the monuments of that dreadful anger which the crimes of the guilty had provoked!

The beautiful and productive valley, with all its

busy life, of pride, wealth and arrogance, defying the Almighty power, went down; the river Jordon flowed in to stay. The Dead Sea was made 1,300 feet below the Mediterranean—the lowest body of salt water in the world. An eminent traveler says: "He lay like a cork upon its surface."

The mystery has been solved. The specific gravity of water being 1,000, this is 1,211, a degree of density unknown in any other but Salt Lake. As the people here are the *Saints*, in these latter days, they will not be the subjects of Almighty punishment, like the last named.

Brigham Young is a great man, I answer, when asked about him. No one can doubt this, who is acquainted with Utah as it now is, and recollect what it was when first settled by him. He is a man of much shrewdness—far-seeing; has thought much and mingled much; observed closely the various workings of practical life, and is a man of the highest executive ability—would have succeeded in any branch of a business life he may have undertaken.

Personally, he treated me with liberality and kindness, as the Mormons do all those who visit among them, and do not make themselves obnoxious by undue interference with them. In a rambling conversation with Brigham Young, I referred to Joseph Smith, as not having an unspotted reputation when

he lived in my State—not a good citizen. "The Gentiles," he said, "knew nothing as to our religion; they vilify my people; that to notice them, would be too great a sacrifice for a man to make. I never embrace any man in my religion; but, Brother Smith, (they always address each other as brother and sister,) established a religion that will save us, if we embrace it."

Nothing but a strong religious conviction (be that right or wrong) could harmonize such opposite, conflicting human elements, and subvert the plainest principles of our common nature.

SUNDAY IN SALT LAKE CITY.

MR. EDITOR:—I am reminded of the promise made you in my last letter, to give a Sunday in this place with the self-styled Latter Day Saints. Sunday is a day here where business places are closed. They are a peculiar people—zealous in good work for the only Church, in their inflated imaginations—that is, to keep unspotted from the world a peculiarly favored few of the human family. The day is observed and respected, as far as a stranger can see about the city with decorum, amongst all the inhabitants thereof. All seem to put themselves on Sabbath day behavior, at least on the streets.

The chosen people of God are coming from the East and the West, the North and the South—from

the uttermost parts of the city, and some from the adjoining country—to the Tabernacle. Brigham Young will preach at two o'clock. As there are no church-going bells in this Mormon consecrated land, I availed myself of the advice Mr. Beecher gave to strangers desirous of finding his church, "to follow the crowd." Service is in the old Tabernacle, which will accommodate about two thousand persons. I went early and got a seat; but soon the house became crowded, the entrances filled, and many outside that could not gain admittance. These are truly a church-going people, whose *God is Brigham Young*, and the Sainted Joseph Smith their Bible—the only truly blessed on earth, and to be blessed in Heaven.

The audience are sorted—all the women occupy the two rows of seats through the centre, and the men on either side. The choir are at one end of the house with the organ; while at the other there is erected a gallery capable of seating one hundred and fifty or more of the great men, with a small modest looking pulpit in the centre. There the Bishops, the Twelves and Seventys, and all the inspired Prophets and Apostles discourse wise counsel, look demurely, and pronounce heavenly blessings upon their devoted, bigoted, deluded, ignorant followers.

The choir sing a hymn, then preaching begins, and the sacrament is administered at the same time.

Real work now goes on, the hardest of which is the preaching. Several loaves of bread are cut in slices and piled upon large platters, on a table in front of the pulpit, where it is broken in small pieces by a few men, and put in baskets. Several men take and pass them through the audience as seated. After all are served, a number of large pitchers are filled with water and refilled until all are supplied, when the sacramental service is finished. This is repeated every Sabbath in a wholesale way, to give the sacrament to between two and three thousand persons during the time of preaching. They are open-communion; everybody can partake if he wishes. The preaching is more after the order of a political convention in the States than Church worship. No text is taken, but any one of the priesthood gets up and says what he pleases—speaks his own thoughts in his own language, in his own way; perhaps several will talk during one meeting. Their sermons, (if I may call them by that name,) are of a business character; indeed, they use the day for business instruction and direction of the coming week, the every day matters of life, what they must do, and what they must not do, to make themselves united, prosperous and strong; to combat and resist the wickedness of the gentile world. Brigham deprecated severely the dissenters from the Church;

called them some names that would not look well on paper; instructed his people not to trade with or give their money to any but their own brotherhood, even if they were obliged to pay much more. If they did, he said, they should not go to Heaven, as the Sainted Priesthood would be there to testify against them; that the Almighty had directed, guided and prospered them in the midst of these naked, unproductive mountains, in the valleys of which the great God was gathering to himself a few of the faithful from all the different families of man, through whom he would save and bless ultimately a few of all the different races of the human family. The others would all be lost at the judgment day, as Joseph Smith and he (Brigham) and Jesus Christ would be there to judge a sinful world.

I looked over the assembled multitude with the intention of doing them justice, and truth compels me to say that it is very seldom so many nationalities can be brought together, where the animal more largely predominated, and less of the intellectual.

Some of the language that went out over the sacred altar did not conform to any religious or grammatical standard of the English language with which your humble correspondent is acquainted. They are a heterogeneous community, mostly of the working class from the old countries, bigoted, and controlled by a few more intelligent leaders.

Brigham Young rules all things in Heaven above and in the Earth beneath as to Mormondom; all things are measured and controlled by his Church standard. There was no other Church in Utah until within a few weeks. Rev. Mr. Foot, an Episcopal clergyman from New York, came here and established the Church with good promise of success. Mr. Foot is a young man of commanding ability, well calculated to plant the Church and make it successful, even among these bigoted people. But there are a few good church people here, and many others who are not in communion with the Saints, who give this Church their presence and support, and will give it permanent prosperity.

The Mormon Church is now receiving a large revenue annually, as one-tenth of all that the ground produces; of all that every man or woman raises by labor, by trade, by mechanics, or in any other way; not one-tenth of the net income, but one-tenth part of whatever human industry and skill produces is used for that purpose. The church property is located in a ten acre lot, enclosed with a wall laid up in solid masonry twelve feet high, with large, double gates as entrances. The new Tabernacle is now nearly completed; is one of the largest and finest erections in this country; is capable of accommodating ten thousand people; covers the most ground

without inside supports of any other building. A large number of cut stone columns are first built about twenty-five feet apart, the space between to be filled with large folding doors, to open in summer and close in winter. The superstructure is one of the most perfect specimens of architecture that can be found anywhere; its amplitude and beauty demands admiration. The largest organ in the world, as they say, is now being built for their use here.

The foundation to their Temple is finished, and if completed according to the beginning and plan, will be a magnificent erection. The hard earnings of a poor, ignorant and bigoted community are here piled up, layer upon layer, stone upon stone heavenward, worthy of a better expenditure, to gratify the aspiration and perpetuate the ignominious name and fame of a great self-styled patriarch and potentate.

We envy not the man who has no better monument to go down to posterity (in these times) than to build Egyptian Pyramids out of the hard earnings of the poor working man, like some of the kings of the old world, who supposed they had a divine right to pile up, if they chose, all the rest of mankind to make themselves a road to get into heaven.

Salt Lake City, July 5, 1867. G. W. P.

It would seem that something good can come even out of Nazareth. The following effusion was

written by a Salt Lake City poetess, on the receipt of the telegraph news of the assassination of President Lincoln:

Every home and hall was shrouded,
  Every thoroughfare was still,
Every brow was darkly clouded,
  Every heart was faint and chill.
O! the inky drop of poison
  In our bitter draught of grief!
O! the sorrow of a nation
  Mourning for its murdered chief.

Strongest arms were closely folded,
  Most impassioned lips at rest;
Scarcely seemed a heaving motion
  In the nation's wounded breast.
Tears were frozen in their sources,
  Blushes burned themselves away,
Language bled through broken heart-threads,
  Lips had nothing else to say.

Yet there was a marble sorrow
  In each still face, chiselled deep,
Something more than words could utter,
  Something more than tears could weep.
O! the land he loved will miss him,
  Miss him in its hour of need!
Mourns the nation *for the nation*,
  Till its tear-drops inward bleed.

The government of the Mormons bears a resemblance to that of Turkey. Mahomet, the founder of Mahometan religion, was subject to epileptic fits which furnished him with convenient opportunities for communications with the "Spirit Land," in which he received new chapters to be added to the Koran

justifying him in what he wished to undertake. We might with propriety substitute Brigham Young's name here for Mahomet's, as he professes to receive from a divine source an authorization to do whatever his false professorship may desire, and thus proselyte a poor, ignorant multitude of followers.

While speaking of these eratic people we are reminded of the domestic relations of Turkey, the government of which is an absolute monarchy. So also is the Mormon Church rule, or Brigham Young's government, which is taken from their Koran, and is altogether oriental. The supreme government of "Latter Day Saints" seems to consist of a President and Prophet united, who is Brigham Young, a revelator and the vicegerent of heaven. He has three chief counselors associated with him, then twelve apostles, then bishops enough to have one in each town and village. The bishop is judge, jury, ruler, alcalde, teacher, preacher, magistrate, and perhaps store-keeper, manufacturer, farmer, or hotel-keeper of the village. Then there are several subordinate officers under the control of the bishop, *omnis homo*. Young makes all the appointments, and manages generally to get the right man in the right place for him.

In Turkey the Sultan is supreme, uniting in his

person the highest spiritual dignity with the supreme secular authority. He makes the laws, but is not in any way subject to them. The Sultan is not a crowned monarch, but girds on the sword of Osman, and is sworn to defend the religion of Mahomet.

Brigham Young also took up the Mormon's slaughtered prophet's sword, where it was stricken from his hand, and is (at least in his own estimation) appointed of Heaven, and sworn by his followers to maintain and perpetuate the religion of their more modern Mahomet.

The Koran of Turkey properly gives the Sultan but four wives, but the Sultan gives it a liberal construction, and takes as many as his fancy dictates.

Brigham Young gives his Koran a very liberal construction, and also takes as many wives as *his* fancy dictates. The lives of the women of an imperial harem is monotonous, one unvarying round of dressing, walking in the pleasure grounds and attending dances, where "music arose with its voluptuous swell," being wholly prohibited from mingling with the world outside of their prison house. Not so with Brigham Young's wives; they are self-supporting as far as it is possible for them to be. He is a great utilitarian; all his family must be industrious and economical. His wives each have separate

apartments, take care of their own household, and are, to a large extent, separate families. Here, as in Turkey, the grandees, the great officers of Church and State, and all whose wealth will admit of it, have their seraglios. Here a marriage ceremony is performed each time a man takes a wife; but marriage, as understood by a Christianized people, has no place in Turkey.

Mr. Young's family does not number more than a few hundred, while that of the reigning Sultan amounts to as many thousands.

By the religion of Mahomet and Young, women are not considered as having souls of the same grade as men, and are admitted into His paradise on high only as men take them along.

We have thus briefly run a few parallels between these two systems, not for the purpose of favoring either, but because they are in many ways so much alike, and leave one good Christian reader to make his own conclusions as to the unnatural, unholy practices of these people—forbidden of God and common humanity. Such a domestic life is like an island with a stream of cold water flowing all around it—not a part of the main land, fragrant with the holy associations of one father and one faithful mother.

If thou hast crushed a flower,
The root may not be blighted;
If thou hast quenched a lamp,

Once more it may be lighted;
But on thy heart, or on thy lute,
The string which thou hast broken,
Shall never in sweet sound again
Give to thy touch a token!

If thou hast loosed a bird,
Whose voice of song could cheer thee,
Still, still he may be won
From the skies to warble near thee;
But if upon the troubled sea
Thou hast thrown a gem unheeded,
Hope not that the wind or wave shall bring
The treasure back when needed!

If thou hast bruised a vine,
The summer's breath is healing,
And its cluster yet may glow
Through the leaves their bloom revealing;
But if thou hast a cup o'erthrown
With a bright draught filled—oh! never
Shall the earth give back that lavished wealth
To cool thy parched lip's fever!

The heart is like that cup,
If thou waste the love it bore thee,
And like that jewel gone,
Which the deep will not restore thee;
And like that string of harp or lute
Whence the sweet sound is scattered—
Gently, oh! gently touch the chords,
So soon forever shattered!"

We are ready to acknowledge that it is difficult to give our impressions of these—the Latter Day Saints—with feelings evenly balanced. We had our prejudices before going among them, and with difficulty could they be wholly overcome; yet we tried

to get right impressions—to see and know them as they are in their own land, and in their own homes, as individuals, as families, and as a great people; the government of which is a despotism, the most perfect union of Church and State in the world—inflexible in its exactions, omnipresent in its watchfulness, foresighted in its plans and unscrupulous in getting means to attain its ends.

One receives the impression that Brigham Young is general proprietor—owns everything, the real estate, the industry, machinery, animals, and all the Mormons. Indirectly he does, because he has no superior power on earth—is a prophet, inspired of Heaven; can do no wrong; is too superhuman to be questioned; being President and Governor, gives him the power of handling the property as best suits his purpose. He is the embodiment of irresponsible power, such as is dangerous and despotic, in any mortal man's hands.

His position is such, that if he does not violate human nature, and take from honest toil and honesty enough to enrich himself beyond all other men, it is not for lack of opportunity, or authority, or inducement to take it, for he holds in the eyes of his people all the authority that heaven and earth can bestow upon him—he alone is prophet and king!

Not a man, among all his subjects, dares to dis-

regard his orders. Notwithstanding this would-be great "I am" power, who has enriched himself beyond any other man in this country, from the hard labor of an ignorant multitude of followers, yet I freely confess that much good has been done, in gathering the poor from various parts of the land; uniting them together; making them earn a better living than they ever had before; and as much, if not more civilization than they had before coming here.

Viewing these people in the light of the high civilization which charaterizes our people of the present day, we must regard the Mormon system as insufferable licentiousness. This heavy, dark cloud of a dark night, which they spread over themselves, seems too obscure, and almost covers up that which, under other circumstances, would receive the enthusiastic praise of all good people, for what they have done towards developing our country under so many adverse circumstances.

These people must be under the influence of a fanaticism, remarkable for this enlightened age, when they believe that the Prophet Smith, in 1826, found in the depth of the earth, brass plates that had been there for many centuries, by a perpetual miracle in the State of New York, town of Palmyra—that the plates were so ancient that no one but he, the miraculously endowed, could decipher the wonderful lan-

guage. Yet, they were found in a rough box, such as is used for common window glass. This was a bigger thing than even the "Cardiff Giant."

Smith interpreted the plates, with a stone in his hat, (perhaps it was the Stone Giant, for he was found in that neighborhood!) while another man wrote down the revelation—which made the Book of Mormon. Nothing but a remarkable fanaticism could entertain such material; every principle of humanity and common sense is outraged by its sacrilegious pretensions. The leading principle of their faith and practice does not seem to have been on the miraculous plates; but Joseph Smith, subsequently, had a revelation authorizing and establishing plurality of wives, as the perfection and crowning work of their religion, while he was at Nauvoo, in 1843. This new and everlasting covenant, he said, was instituted before the foundation of the world, and was given him to establish the fullness of his glory: "And verily, verily, I say unto you, (Smith,) that whatsoever you seal on earth, shall be sealed in Heaven! and whatsoever you bind on earth in my name and by my word, saith the Lord, it shall be eternally bound in Heaven; and whosesoever sins you remit on earth shall be remitted eternally in the heavens; and whosesoever sins you retain on earth, shall be retained in Heaven." Such an assumption of superhuman pow-

er can be entertained only by a person filled with feverish fanaticism.

Plurality of wives, more especially with the officers of the Church, seems to be the ground work of their faith, and they pride themselves on the number they have, and can be made to live with them reconciled, and be peaceful, rival wives. They, like the Indians owning horses, seem to feel their superiority, and that they are to be good and holy men; receive honor in proportion to the number they have. We were informed that Young had three daughters, the wives of one man. By no way can you learn how many wives Brigham Young has, if he knows himself; but it is said he does not always know his own children. How a man can support several wives is a matter of little wonder, when we Gentiles are obliged to work in season and out of season sometimes to give even one a liberal support. But they say *their* wives are self-supporting—they sew, make gloves and mittens, knit, dry a large variety of fruit, can peaches and other fruits, put up garden seeds, spin and weave, (not street yarn!) but always doing something that will give at least a little return.

Then, too, as a community, they do not change their bonnets and dresses—have rich silks, furs, gold watches, with each change of the season, like the ladies of the outer world. They are no doubt hav-

ing as comfortable, and perhaps a better living, most of them, than they ever had before they were Mormons. They had an humble origin—have had a very humble, degraded life—have no wants beyond those imperatively demanded by nature.

While the Government will not, we hope, persecute a hundred thousand people by making war upon their homes, yet they cannot be received into the community of States, as long as such a system prevails among them, for in that event all the leaders would be fit subjects for the Penitentiary!

Mormonism is a dark spot on our now clear-shining sky of a free civilization—a perversion of the real affections of the human heart—mockery of the family relation—a ludicrous perversion of true religion. The past history of these people shows beyond all question that their peculiar institution cannot be sustained. When surrounded by a high standard of civilization, it must either go down or travel to some uninhabited country. While they were almost hid away from the outer world, in their mountain valley home, life was prosperous with them, and their favorite plurality system grew in proportion to their prosperity, till now it presents a strong front; but how long it can now maintain its present strength is uncertain.

They could, while isolated, maintain their unholy

system; but now, when the iron track has climbed over the mountains, and is fastened at their very doors, it will no doubt let darkness out and light in. The influence of that same civilization from which they fled years ago, is again in their midst—which will, most assuredly, in time bring all enemies under its feet. As for the threatenings of Brigham Young, that he will oppose the United States Government as much as he pleases, is talk only. He has had too much experience, and is shrewd enough not to fortify another Echo Canyon to oppose our soldiers.

Above the Sainted City, on a plateau in the foot-hills, is "Camp Douglass," filled with brave United States troops, commanded by a gentlemanly and brave General. A little army of observation commands the city, exercising a potent political and moral restraining power upon the despotic rule of the Mormon Church—giving protection to all men and women who desire the safe shelter of the National flag. After our recent terrible conflict to reëstablish the supremacy of our Government, Young very well knows that rebellion would be utter ruin—that the very first attempt of resistance to this Government would recoil and crush him. While they were shut away in this deep valley, by thousands of miles of dreary mountains and great deserts, they could maintain their diabolical institution. But the great

railroads have brought the world to them as of old, and they must now compete for commerce and business, as they are no longer able to keep them away by high-handed laws.

We can see no great brilliant future for Mormonism. This, like all unnatural, unholy mushroom-isms, after a brief existence, must die and be buried—nobody but its own votaries cares how. The dictates, the instincts of every unbiased heart's past experience; the general spirit of our country; our great civilization, and the teachings of religion, hold out their hands to remove this dark page from our National history.

The sooner Brigham Young receives another crowning revelation, that polygamy is no longer to be tolerated, the better. We were in several families while in Salt Lake City, where there were from two to eight wives; but it was seldom I could see more than one about the house; the others would dodge, and keep where they could not be seen, as if conscious of their degradation in the presence of strangers. One can easily see that they are victims of deep shame, and who would rejoice at deliverance, notwithstanding her *sainted lord's* preaching to make her believe that her forced life is sanctioned by religion, and that her heaven will be happy only in proportion as she conforms to his wishes, and is obedi

ent to his requirements. God created in the fullness of perfection, one man and one woman in Eden, and gave them to each other. These, with their children, make the family—the home. Whoever pretends to be wiser, or wickeder than this, will find himself contending against the immutable laws which the Supreme Ruler has established for the guidance of his children. During my stay here, I found much to admire, many to respect—communed with pleasure and profit before its remarkable nature.

THE CONTINENTAL RAILROADS—THE MIDLAND ROUTE AGREED UPON BY CONGRESS.

Our space will not permit of more than a brief reference to the origin, history and completion of this great enterprise. But a few years ago it required six months to make the journey from any of the outfitting places along the Missouri River to California, with oxen or mule teams. The emigrant crept along a few miles per day, under the scorching sun, over the plains, in a cloud of alkaline dust which his team made—a long journey of terrible suffering, to men and animals, from exposure, hard labor, hunger and thirst. Should the emigrant be unfortunate, and be caught out in winter, it would take five months longer, with sufferings and dangers increased. Notwithstanding the remarkable deprivations and sufferings

which must necessarily be endured over a great part of this overland route, yet the first ten years after gold was discovered in California, it gained a population three times as large as the Nation did the first sixty-eight years after the landing of the Pilgrims. Such was the love of shining gold!

Twenty-three years ago, when General Fremont was exploring these desolate regions, there was a Welshman at Dubuque, Iowa, by the name of Plumb, who talked and wrote as to the practicability of making a railroad from the Great Lakes to Oregon and the Pacific. He was an engineer by business and profession. When he first agitated the subject, there were but few railroads in the country—very little population beyond Ohio. The seeds of the now great city of Chicago were then just planted in the centre of a vast unoccupied prairie. Then trappers and tribes of Indians seemed to own all the territory west of the Mississippi. Here lay comparatively an unknown land of two thousand three hundred miles, across which Plumb's railroad, more a dream than a reality, was to be built. He never relinquished this his favorite plan, and lived long enough to see his early dream made into reality.

In 1846, Asa Whitney came out with strength and ability, advocating the construction of a railway from the Mississippi to Puget Sound; but he could not

obtain either encouragement or aid, and his project failed. Thomas H. Benton, twenty years ago, advocated and urged this work upon the country, with an eloquence worthy of the man. Would that we had space to quote some of his own beautiful language, in his address before the first National Convention, held at St. Louis, in 1849, to consider the subject of a railroad to the Pacific.

Hon. Thomas Allen, of Pittsfield, made the call for this Convention, addressed to the people. He wrote also the address of the Convention to the Nation—also the Memorial to Congress, urging them to donate land and bonds. His plan was ultimately adopted, and was the basis upon which the Pacific Railroads were built. Benton introduced the first bill in Congress on this subject, and pleads that the Nation shall construct the road from the Missouri to the Pacific. He went further, stood higher, than any of his associates in his able speach; he goes back three centuries and a half, and views Columbus searching for the East by traveling West. He finds him stopped by a Continent which he discovered—yet his great thought—"find the East by going West"—has never died. Franklin, Kane, and many other navigators, sacrificed their lives in attempting to solve the problem. But it seemed to be left for our people and this Republic to accomplish the far-seeing

purpose of Columbus, by establishing a world's highway over a Continent, transforming the ship into a railroad car, which day by day, and every day, is launched on the plains, towards the mountains westward. This steam car-ship of the desert goes forth in its majesty and strength each day, freighted with more valuable material, more intellect than any ship that ever circumnavigated the globe.

This was not the "baseless fabric of a vision," with the penetrating mind of Benton. He saw in his imagination the iron horse pulling its train of cars laden with the productions of the world, and in its course whistle our praise and breathe in its capacious lungs our enterprise over desert plains and mountains vast across this great Continent.

Our recent war seems to have more fully developed the great necessity of this work, although the routes had been thoroughly surveyed; yet the Government was not prepared to undertake the great enterprise. Congress had appropriated two hundred and fifty thousand dollars. In all, ten surveys were made, from the far South to the extreme North, and published in several large volumes, illustrated by drawings. After a very careful comparison and investigation of these several reports by Congress, the middle route was decided upon and adopted.

The surveying party, which we will now join in

imagination, start at Omaha, on the Missouri River, nine hundred and eight feet above tide water, passing through the valley of the Platte River, crossing it once, till they reach the highest summit of the Bocky Mountains, eight thousand four hundred and twenty-four feet above the ocean. This is the highest point in all the survey; but the rise has been so gradual, that you can't realize that you are on the summit of the Continent. You now pass over what is mostly a desert plateau, four hundred and twenty-one miles to Echo Canyon, from five thousand to seven thousand five hundred feet elevation. You begin to understand what a desert means. It is a plateau, once the bottom of an ocean, heaved up by volcanic agency, while here and there in it is a sharp, thrusting up of rocks in ridges, looking as if they belonged to some world worn out and left.

Passing through that wonderful place, Echo Canyon, you now enter another plateau, about five hundred miles in extent, but ribbed with naked mountains, rising from five thousand to seven thousand feet. This second and last plateau brings you to the Sierra Nevada Mountains.

Where you cross over this lofty ridge, at the pass near Doner Lake, is seven thousand and sixty-two feet above the sea. You must now descend two thousand five hundred and seventeen feet in the next fif

ty miles. In the next ninety-eight miles you must descend six thousand nine hundred and sixty-six feet more. You are now over and in the valley of the Sacramento. This was the path marked out when Congress passed the Pacific Railroad Bill, to connect the Atlantic and the Pacific.

CHAPTER XXXII.

THE UNION PACIFIC COMPANY—EARLY HISTORY—CONSTRUCTION AND COMPLETION.

The Union Pacific Company owns from Omaha to Promontory—1,085 miles. This Company is a New York organization, composed of about a dozen men, practically, who have built the road and own the most of it. They had the work done by contract—that is, a company within a company, and the profits upon construction have been very large.

The immense amount of materials piled upon the river bank at Omaha, indicate the great work. The thousands of men, teams, ties, rails, and the many appliances, cover the bank for miles. The great cast iron tubes are also there, seventy feet long and eight feet in diameter; one to be placed below low water-mark and the other above it, properly fastened together. They are to be placed upright, all the water pumped out, and then filled with solid masonry. They are eighteen in number, and are to be used in constructing the great bridge over the Missouri, estimated to cost two million dollars.

At first everything must be done with men and teams, as no railroads are built to Omaha; even

their locomotives have to be drawn on wagons one hundred and fifty to two hundred miles. Each mile requires six hundred tons of rail and two thousand six hundred and fifty ties.

Roads in this part of the country average but one thousand seven hundred to the mile. These were collected and brought from long distances to Omaha, and then drawn upon wagons on the line of the road. It is said there were as many as six thousand teams employed at one time hauling materials on the road; but after the first twenty-five or thirty miles was completed a locomotive was placed upon the track to take forward materials.

Thomas C. Durant had energetic associates, but he was the central motive power. Having been a large railroad builder and operator, he engaged largely in the enterprise during the early, uncertain years of the war. He furnished from his private means the larger portion of the first resources. He had built western roads before, over the prairies, in advance of settlements, and had learned how they take along with them population and business. After he completed the first two or three hundred miles of the road it became evident that large profits would be realized. Then the few men composing the company had no more trouble to obtain all the means needed to complete the work. The expenses were

enormous, yet the road was very rapidly pushed forward. Everything, workmen, and a wonderful amount of materials, had to go forward upon one track. With the wonderful amount of means and energy used in forwarding the construction of this road, no obstacles could be presented which were not readily overcome. The unusual strange camp life of the workmen was more like a large advancing army than railroad makers. A train of cars containing provisions, cooking apparatus, and beds, or rather blankets, for fifteen to eighteen thousand men; also tents like those of an army, all accompany the working multitude, each night having a different home. The ground was graded usually fifty miles ahead of the track-layers, when they would put down the sleepers, and when all was ready four rails were drawn from the cars, laid and spiked fast in a minute. Thus the gradually advancing mixed multitude pushed on the great work, beyond laws and officers, and away from the restraints of civilized society.

When a place was selected for a new terminus sixty or eighty miles ahead, the gamblers, the desperadoes, the State Prison graduates, and the most profligate men and women congregate, lay out the tent city, open their rum shops, gambling houses and hell-houses. Eighteen thousand men receiving four dollars a day and board, money was abundant, and this

traveling "Hell," as it was called, obtained more than their share of the profits on construction. Murder and lawlessness became so common that the workmen were obliged, in self-defence, to organize vigilance committees and exercise their own laws. They would mark these desperate fellows, and when any one had done enough to hang him he would be waited upon by a committee. They would send an armed band into his gambling or drinking-house, march him away, give him a jury trial, allow him a few hours to prepare for death, and before morning he was hanged. As many as a dozen have been thus suspended in a single camp in one night. The most of those they hanged were murderers. The halter was the only punishment the villains dreaded. When an inquiry was made after one thus disposed of, they would answer: "I understand he broke his neck in climbing a tree."

Another feature, unprecedented in making railroads, was, that the printing press traveled with the working trains, and daily papers were issued. This was a kind of portable business village, and would have drug shops, restaurants, whisky saloons, and all kinds of goods. For this privilege the occupants would pay fifteen hundred or two thousand dollars to the railroad company for ground sufficient upon which to place their tent. The road was driven

forward, summer and winter, with an energy unprecedented; gradually rising up ninety-two feet to the mile from Cheyenne to the summit of the Rocky Mountains, when a road is made through and they pass onward.

No railroad could have been successful through this woodless country if coal had not been found suitable for the locomotive. But fortunately, here in the mountains, it has been found so near the track that it can almost be shoveled into the cars. It is soft, and of a middling quality, which is good for the engine. No section of country could be more destitute of wood. On the whole road from Omaha there is not a tree on the route. The first one stands marked, "The Thousand Mile Tree!"

In the construction of the railroad, Brigham Young took a large contract to do the grading for the track, fifty miles each way from his people, hoping thus to keep his "Saints" the more secluded and draw money into his settlement, or more especially into his own possession. This gave him a favorable opportunity to let out the emigrant to work, and thereby get back the money he had advanced for his passage, as all emigrants bind themselves to refund this money as soon as they can obtain it. I was informed that among over a thousand men who worked on the railroad from the Mormons, there

were no murders, no fighting, no drunkenness. There is but one place in Mormondom where intoxicating liquors are publicly sold, and that individual pays over seven thousand dollars a year for the privilege.

CHAPTER XXXIII.

THE CENTRAL PACIFIC COMPANY—ORIGIN AND CONSTRUCTION.

The men who first undertook the construction of the California portion of this continental line were Charles Crocker, Stanford and Huntington. On the anniversary of the battle of New Orleans in 1863, a year and a half earlier than work was begun at Omaha, the ground was broken at Sacramento. Governor Stanford shoveled the first dirt from a wagon, where the road was to commence.

Now having made a beginning, the many difficulties to be provided for, seeming almost insurmountable obstacles, which must be overcome, required much ability and an unconquerable energy that no obstacles would stop. For hundreds of miles on the level plains, nature had done most of the grading; but foot-hills, larger hills, and the worst mountain ranges for the railroad on the continent must be penetrated. Some mountains were soft and sliding, in the rainy season nearly impassable, while others were rock, so hard that it seemed impossible to drill them. The rails, and much of the materials, must be shipped from New York, and go all the way

round Cape Horn, a distance of nineteen thousand miles. There was at one time thirty odd vessels pushing their road around Cape Horn, loaded with locomotives, rails and other articles for this road.

Among the heavy forest of the Sierra Nevadas were a quarter of a hundred saw mills, making for the road six hundred and twenty-five thousand feet of lumber daily. A thousand men were engaged daily to supply the mills with logs. Their axes were the first echoes of civilization that rang through this part of the mountains and caused the mighty woods to lie down and make a road for the nations. The mountains, nearly inaccessible, gave forth timber and stone, with a remarkable liberality. The two roads laid down generally seven hundred tons of iron daily during the working days. One road laid over ten miles of rail in a single day and the other one laid eleven. Eight thousand Chinamen were employed, and the road could not have been built as soon, nor as cheaply, had it not been done by these people. They proved to be the most profitable workmen for the company. Among them all there were no murders, no use for vigilance organizations, no disturbances, no whisky shops, and consequently no drunkenness. These heathenish children set a good example for those building the other road. The road goes slowly up the mountains. If

they meet one they can neither climb over nor go through; therefore, around and up it the track winds till a point is reached high enough to move across on the opposite ridge of another mountain over very high trestled work. In one place the road goes six miles round a mountain and makes but one ahead; they come to solid granite mountains which must be blasted away, and the track clings to their sides, or a tunnel is driven through them. There are fifteen tunnels, which united would amount to six thousand two hundred and sixty-two feet.

Down the sides of the great mountain dashes the head waters of the American River, a mere brooklet, while the surrounding mountains rise till their tops are covered with perpetual snows. Nearly hid under the eternal snows is the little "Summit Valley," about a mile in length by half the distance across, and looks as if it had moved away from a more congenial sunshine to spend a summer amid broken, desolate rocks, volcanic mountains and eternal snows. Then comes the long tunnel through the summit range, through rock as hard as porphyry, and could be blasted only by glycerine, seven thousand feet above sea level. The track now climbs along the mountain side; where the rock is the very hardest kind of granite the excavations were made

with great difficulty. The fifteen tunnels are the best evidence of the rocks. The mountains climbed to the home of eternal winter, and a road for the steam horse made through their tops; so that when seen in August, at a distance, the tunnels look like a hole made through a great snow bank with gray lining.

Here among the highest of the Sierras, where the avalanches slide, are the sheds, made strong that the snow may pass over. Where the snow falls from twenty to thirty feet deep, are sheds supported by large, round tree-trunks placed securely beside the track, and supporting a double roof made of inch boards, so that the snow falls on either side away from the track. These sheds are now about forty miles in length and answer a good purpose.

The mountains passed, we came to one of Nevada's everlasting white alkali deserts, forty miles wide, when the road reaches the Humboldt flats, where the grade is not difficult to build the road the balance of the way.

The Pacific is the best built road. The Union is the longest and began later. When we consider the unparalleled shortness of time in which the work was done, they are monuments of remarkable achievement in this nineteenth century.

CHAPTER XXXIV.

CONNECTING THE ROADS.

We are now on a high plateau, surrounded by forbidding mountains—except for their greatness. A headland rises boldly before us; it is "Promontory Point." Engines and trains from the East and West, with a forest of flags, stand facing each other. A small space as yet—has no track.

The man Evans, who had furnished the Central Company two hundred and fifty thousand ties, and who had furnished the first tie laid, now was there with the last, a good specimen of California laurel, which was properly put in place, and then removed and preserved.

At a given time, the master spirits of the two roads met; then came workmen from the East, and Chinamen from the West, bearing the last ties and rails. A few boards set up is the Telegraph office. Arrangements have been made with all the Telegraph offices in the country, so as to have them connected.

At the appointed time, the last tie is put in place, and before the rails are laid, the telegraph sends over the country, "Are you all ready?" Back comes

the reply, "All ready." The telegraph then says, "At the third tap, it will be finished." "We understand," say the officers. Prayer is made to consecrate the great work, thanking God for having lifted up this great Continent, and for endowing man with such great ability, to complete so great a work. Now the last rail is laid and fastened.

A wire is coiled around a silver hammer, and the President of the Central Pacific taps the head of the golden spike, which announced to the country that the work was done—the roads were united.

In three minutes telegrams came back from the cities: "The bells are ringing and the people rejoicing."

This mountain wedding occurred May 10th, 1869. There were about three thousand people present at the ceremony; but the whole Nation were also present to

"Rivet the last Pacific rail
With a silver hammer and a golden nail;
Now the rising and the setting sun
Shall see the East and West are one.
State linked with State, with iron bands
Our Union shall be one forever."

New York to Omaha.....1,479 miles.

UNION PACIFIC LINE.

	Miles		Miles.
Omaha to Summit Sidney, Nebraska	4	Omaha to Hazard	522
Omaha to Papillion	12	Omaha to Otoe	528
Omaha to Elkhorn	28	Omaha to Granite Canyon	536
Omaha to Valley	35	Omaha to Buford	542
Omaha to Fremont	46	Omaha to Sherman	549
Omaha to North Bend	61	Omaha to Red Butte	564
Omaha to Shell Creek	75	Omaha to Fort Sanders	571
Omaha to Columbus	91	Omaha to Laramie	572
Omaha to Jackson	99	Omaha to Wyoming	586
Omaha to Silver Creek	109	Omaha to Cooper's Lake	598
Omaha to Clark	120	Omaha to Lookout	604
Omaha to Lone Tree	131	Omaha to Miser	615
Omaha to Chapman	142	Omaha to Rock Creek	622
Omaha to Grand Island	153	Omaha to Como	637
Omaha to Pawnee	161	Omaha to Medicine Bow	644
Omaha to Wood River	172	Omaha to Carbon	653
Omaha to Gibbon	182	Omaha to St. Mary's	657
Omaha to Kearney	191	Omaha to Simpson	658
Omaha to Stevenson	201	Omaha to Percy	665
Omaha to Elm Creek	211	Omaha to Dana	672
Omaha to Overton	220	Omaha to Benton	694
Omaha to Plum Creek	230	Omaha to Rawlins	709
Omaha to Coyote	240	Omaha to Separation	721
Omaha to Willow Island	250	Omaha to Creston	738
Omaha to Warren	260	Omaha to Wash-a kie	750
Omaha to Brady Island	268	Omaha to Red Desert	759
Omaha to McPherson	277	Omaha to Table Rock	770
Omaha to North Platte	291	Omaha to Bitter Creek	783
Omaha to O'Fallons	307	Omaha to Black Buttes	792
Omaha to Alkali	322	Omaha to Point of Rocks	803
Omaha to Roscoe	332	Omaha to Salt Wells	818
Omaha to Ogallala	341	Omaha to Rock Springs	829
Omaha to Big Spring	360	Omaha to Green River	844
Omaha to Julesburg	377	Omaha to Bryan	858
Omaha to Lodge Pole	396	Omaha to Granger, Utah	874
Omaha to Sidney	414	Omaha to Church Buttes	885
Omaha to Potter	433	Omaha to Carter	901
Omaha to Antelope	451	Omaha to Bridger	912
Omaha to Bushnell	463	Omaha to Piedmont	925
Omaha to Pine Pluff	473	Omaha to Aspen	937
Omaha to Egbert	484	Omaha to Evanston	952
Omaha to Hillside	496	Omaha to Wasatch	963
Omaha to Archer	508	Omaha to Echo City	986
Omaha to Cheyenne, Wg. (Branch to Denver, 110 miles.)	516	Omaha to Ogden (Branch to Salt Lake City, 40 miles.)	1030

CENTRAL PACIFIC LINE.

	Miles.		Miles.
Ogden to Brigham City, Utah	21	Ogden to Humboldt	491
Ogden to Corinne, (Bear City)	24	Ogden to Humboldt Bridge	491
Ogden to Promontory City.	53	Ogden to Browns	513
Ogden to Monument Point.	80	Ogden to Humboldt Lake.	516
Ogden to Red Dome Pass.	104	Ogden to White Plains	525
Ogden to Terrace Point	124	Ogden to Mirage	532
Ogden to North Point of Desert	136	Ogden to Hot Springs	540
Ogden to Passade Creek	158	Ogden to Desert	550
Ogden to North Pass, Nevada	184	Ogden to Two Mile Station	557
Ogden to Pequop Pass	202	Ogden to Wadsworth	553
Ogden to Independence Springs	207	Ogden to Clarks	574
Ogden to Humboldt Wells	222	Ogden to Camp No. 37	586
Ogden to Denver	242	Ogden to Reno	593
Ogden to Peko	258	(Branch to Virginia City, 17 m.)	
Ogden to Osino	268	Ogden to Verdi	603
Ogden to Elko	278	Ogden to Camp No. 24	619
Ogden to Moleen	290	Ogden to Boca, California.	620
Ogden to Carlin	301	Ogden to Trukee	628
Ogden to Palisade	310	Ogden to Summit	642
Ogden to Cluro	321	Ogden to Cisco	656
Ogden to Be-o-wa-we	329	Ogden to Emigrant Gap	664
Ogden to Shoshone	339	Ogden to Blue Canyon	670
Ogden to Argenta	350	Ogden to China Ranch	673
Ogden to Nebur	358	Ogden to Shady Run	674
Ogden to Battle Mountain.	367	Ogden to Alta	679
Ogden to Stonehouse	381	Ogden to Dutch Flat	681
Ogden to Iron Point	394	Ogden to C. H. Mills	689
Ogden to Golconda	405	Ogden to Colfax	693
Ogden to Tule	416	Ogden to N. E. Mills	699
Ogden to Winnemucca	422	Ogden to Clipper Gag	705
Ogden to Rose Creek	432	Ogden to Auburn	711
Ogden to Raspberry Creek	443	Ogden to Newcastle	716
Ogden to Mill City	450	Ogden to Reno	722
Ogden to Rye Patch	474	Ogden to Rocklin	726
		Ogden to Junction	730
		Ogden to Antelope	733
		Ogden to Arcade	740
		Ogden to Sacramento	748

Ogden to Sacramento ..... 748 miles.
Sacramento to San Francisco ..... 120 miles.
NEW YORK TO SAN FRANCISCO ..... 3,377 miles.

Now the National Mountain Wedding over, the last link is supplied, and the Continent is bound together with iron rails, and the distance around the globe shortened, so that now the long journey can be made in three months, bringing the Nations of the world much nearer to each other. "You leave New York by steam to Liverpool; by steam on land you spin through France; by steam you go from France on the water to Alexandria; from Alexandria, on rail, steam takes you to Suez; from Suez to China or Japan, on water, by steam; from China to San Francisco, by steam; and now overland, by rail, to New York."

This earth-born civilizer pushes its way among and through the most enlightened Nations of the earth. England, with her untiring industry—aggressive, massive, a true representative of the old Roman civilization. France, the umpire of taste, the creator of fashion, a workshop of the beautiful. Egypt, a land that ever has been an unsolved problem. China, with her never movable half-civilization waiting her time; and India expecting the English people to do more for her than she can do for herself.

And next comes our goodly heritage, the New World, working out for all the people of the Old World the great problem of self-government—freedom for all, individual responsibilities, aspirations and achievements.

Wherever these lines of rapid communication traverse a country, God establishes a superior civilization, and the shuttles seem to start anew, to weave the habiliments of which all people must wear—the religion of the earth—and here along this "highway of Nations," are gathered the wealth, the population, the intelligence, working thought, power to plan and power to do the best which the world possesses. By means of this steam power, the heaviness of olden times is beginning to be arrested, by constant contact with that which is more vigorous and healthful. William H. Seward said, when that road shall have been extended to the Pacific Ocean, disunion will be rendered forever afterwards impossible.

There will be no fulcrum for the lever of Treason to rest upon. There seemed to be special eras in the world's history; also, in the advancement of the human family. Our time is the day for making the earth smaller, by creating speed, making all the nations around the globe more neighborly; a brotherhood practically saying: "Prepare ye the way of the Lord; make straight in the desert a highway, for our God and the glory of the Lord shall be revealed."

Everybody desires to know how the Continental Railaoad is built, befitting or betraying the remarkable endowments of Congress.

Well, with a qualification, as well as new roads

are generally built in this country; as good as was consistent with such haste; the ties are larger, and put closer than the eastern roads; the rails are Pennsylvania iron, and as good as the iron consciences of those men permitted.

In portions of the road, reconstructions are necessary, and should be made; not properly ballasted; wooden bridges and culverts should be rebuilt with stone; embankments need widening; many short curves should be straightened, and grades evened up. But these reconstructions and improvements no doubt will be made. The road has been completed, and will prove such a mine of wealth to its owners, that they should be held by the public and the government to a strict performance of all their obligations. No national improvement was ever so liberally endowed; none was ever so rapidly built. The government aid was given, in ignorance of the real cost of the work. The cost was much less than was expected. Congress voted sixteen thousand dollars per mile of plain country; thirty-two thousand dollars per mile of more difficult work, and forty-eight thousand dollars per mile of the higher and rougher mountains passed over. Nearly two-thirds of the entire line is through "plain" country; yet, from the description, only about one-third was so counted. The average government grant was thirty thousand

dollars per mile, and the companies first mortgaged bonds, which had a ready sale, and doubled this amount as the cash capital for the construction of the road, or sixty thousand dollars per mile. But the actual cost has not probably been in excess of the government bounty alone. After equipment, it did not cost over forty thousand dollars a mile. This would give the owners a net cash profit, on construction and opening the road, of thirty-four million of dollars.

But more than this: The company own the capital stock of the road, and also own half the lands on either side their tracks for a width of twenty miles.

This has been one of the most gigantic speculations on the American Continent; and it is hoped that no other Railroad Company will ever receive such government aid as this has. But the great work is done—the great need—and only by such magnificent liberality could the country have the Continental Railway so soon—a large addition to our Nationality, to our Commerce, to our Wealth, that will be in a few years worth the cost.

As the Pacific Railroad is now, and will be for some time to come, an interesting subject in our American history, is our justification for this article upon it.

CHAPTER XXXV.

NEVADA—MINES AND MINING—AGRICULTURAL PRODUCTS—PHYSICAL ASPECTS.

Passing from this great inland basin of Utah from Mormon development, we travel over an unusually frowning, barren, alkali, ever-present sage brush country, seemingly useless, except to hold the continent together and teach patience to travelers, a distance of three hundred and seventy-five miles to Austin, the center of mining in Eastern Nevada, as Virginia City is in the Western. These two are the most conspicuous and representative places of silver mining on the Pacific coast or on the continent. Austin is the metropolis, the business center for a very large mining section north, east and south, for hundreds of miles, where the distant mining camps obtain supplies and transact their principal business. The town is built near the center of Ruse River valley, on the east side, and like most mining towns, is straggling, crowded in a canyon between high, ashen, treeless, naked mountains, towering up hundreds of feet high on either side the principal thoroughfare. Tunnels, shafts, ditches, and various other excavations. with immense piles of granite

and reddish earth, show the persevering industry of the miners—like a prairie dog village, magnified from mole-hills to mountains.

Several large quartz mills are located here, owned by companies in the Eastern States; some very expensive, costing over two hundred thousand dollars. But few of them have as yet been remunerative to their owners. Some never started on the work for which they were built. Most mining companies think that when they can get a mill their fortunes will be made. Here lies the disappointments and the heavy losses to very many who make mining investments. They discover when too late that they have done their first work where they should have done their last—began at the wrong end of the business. No individual or company, if they know their interest, will think of erecting a quartz mill until their mine or mines in the vicinity are sufficiently developed to insure paying mill work. Mining is an uncertain business, and those who build expensive mills without first getting out paying ore enough to pay for erecting a mill, are very likely to be ultimately disappointed, and their imaginative fortune not realized. Expensive mills can now be seen about the country rotting down for want of paying ore to work. Many mills have been built where the prospects at the time were favorable, but after the

surface ore was worked out no more could be found, and the mills remain idle, or are taken down at a heavy loss and removed to some other district.

Companies often send out incompetent, inexperienced agents, who spend their money, either ignorantly or otherwise, to little purpose, and often mislead those who furnish the money, and know little or nothing of the mining business. No one can be too careful here at the East about making any mining investment based on the representations of other interested parties. Those who do so are fortunate, indeed, if they ever see their money returned without interest. Quartz mills that pay usually give large returns to the owners, and those are heard from in the East, and are used as make-ways for the many worthless ones to deceive a confiding public. There is some truth in the old saying, that it takes a gold mine to work a silver mine, and sometimes to find one.

The Austin silver mines are narrow, but generally rich. The ore is not difficult to reduce, as most of the leads are so narrow that some of the wall casing must be removed to get working room. A large proportion of the inhabitants work under ground. The town looks quite deserted during the day; but at evening, the miners seem to come forth like exhalations from the earth, or like bees from a hive of a

warm summer morning. When a mine is sunken a few hundred feet, if it be a good one, a stationary engine is so placed, and the requisite machinery made so that the workmen are let down and drawn up the shaft hundreds of feet with safety and rapidity. A shaft is commonly four by six feet in the clear, so that a small car can be let down, in which the ore is placed at the bottom of the mine, and raised to the surface, placed on its track, and run off to the "dump pile." Should some of the ore be poor, experienced men sort it, and throw out all that will not pay milling expenses.

A straight shaft is generally put down on a lead; and if rich or paying quartz is found, the lead is drifted upon—that is, side cuts made from the shaft along on the lead, when the ore so obtained is wheeled to the shaft and hoisted. Where the distance is long, a car track is put down in the mine, which is more convenient than to wheel it.

There is a fascination and much information in studying the quarrying, and the various processes requisite for the proper reduction of gold and silver ore. The construction of a great steam mill, with its very heavy, somewhat complicated machinery, working out yellow bars or shining bricks daily, is of much interest. The quartz is deposited in front of the stamps, on a solid floor, where it is broken by a small

stone hammer into small pieces; then it is shovelled into the feeders or stamp bed, where the great iron stamps, weighing from five to eight hundred pounds each, hammer away day and night, rising and falling sixty times a minute, making the building tremble while they crush the rock to powder—making the surrounding hills resonant with the heavy music, every echo from which says—"bullion!"

We do not mean the hydra-headed stamps of Uncle Sam, which produce other and different notes, but the crushing music of the mill stamps, every blow from which has a silvery ring.

The pulp, if free from base metals, is now put into amalgamating pans, with quicksilver and plenty of warm water, in which the whole is agitated, the refuse material passes off in the water, while the quicksilver collects the precious metal into a mass of shining amalgum, which is put into a fire-retort of iron, with a pipe allowing the fumes of quicksilver to escape, which is condensed into cold water to be again used. The metal in a rough state is now taken to an assayer, where it is melted and run into bricks or bars, of the precious metals, with the fixed value stamped upon it. The process seems simple, which takes heavy, worthless-looking ore, and transforms it into glowing gold and shining silver. Yet, this philosopher's stone has been discovered only by

unusual toil, great skill and almost endless experimenting.

Silver ore is quarried, broken and crushed, very nearly as gold quartz. When ores of either kind are found in combination with baser metals, after being finely crushed, it must be roasted in large ovens, until the corroding substances are burnt away, before quicksilver will take up the desirable part.

Silver mining, like all that is money, is very uncertain. A miner may have a claim to-day, giving promise of a fortune, and he could sell it for a hundred thousand dollars, but to-morrow the quartz may stop, or the lode may be cut off. He may, perhaps, find it again, after excavating the mine a hundred or three hundred feet, and he may never find it. In hunting for it, he may expend all his means, and more, without finding it, and he finds himself a poor man, but not discouraged. He packs himself, and off he rushes to find another claim. He may find and prospect a hundred, and not find silver in paying quantities. If my observation and experience be correct, not one lead in a hundred contains ore in quantities to even pay for working. An experienced man can take from almost any lead a few specimens which will assay rich, while it would be worth less for working. These are the kind of very rich mines, the product of which have been so often sent

to New York and the East, as very many men have learned by dearly bought experience, first and last. The mining business is like a lottery, where there is thousands of blanks to one prize.

The first discovery of silver at Austin was made by a pony express rider in July, 1862. The information soon spread, excitement ran high, and the usual rush of miners, speculators, traders, mechanics, and all manner of gamblers followed. The town was rapidly built up, went through the trying ordeal of infant mining camps, and finally settled down into a substantial mining and commercial city. There are no villages in this country; every place is either a city or a camp; consequently many places spoken of here as cities, we would call small villages or settlements.

All the heavy machinery had to come from California; also supplies were hauled by teams three hundred miles and upwards up the Sierras and over the desert, at a cost of from eight to ten cents per pound.

The railroad is eighty miles north of the city. A good wagon road through Ruse River valley connects it with the railroad on the Humboldt Flats. This valley is the largest and most productive valley in Eastern Nevada; it is nearly a hundred miles long by from five to ten miles wide, lying between

two parallel mountain ranges running north and south, and having on either side many mining districts.

Ruse River is something of a stream, starting from the snowy ranges sixty-five miles south of Austin, and runs through the entire valley north, losing its identity in the sink of the Humboldt. The river sinks some ten miles south of the city and travels in subterranean passages about twenty miles, then comes to the surface again and goes on in the usual way.

Ranching is quite profitable in the valley; barley is usually a heavy crop and commands a good price for feed. Some other kinds of grain are grown, and all the varieties of the hardier vegetables are grown successfully. But a very small amount of the land in the valley can be cultivated for the want of sufficient water to irrigate. Here, as elsewhere in this country, the amount of land cultivated depends wholly on the amount of water which can be obtained.

No fruit has been grown here of any kind. The apple trees we saw growing (only in one place) in the valley looked unpromising. Evidently they were not at home here. The nights are too cold in early spring, which destroys the fruit buds. The valley is five thousand feet above the sea, and the

town six thousand feet; the air is light; physical exercise causes shortness of breath. Those wearing artificial teeth are troubled to keep them in the mouth, so light is the atmospheric pressure.

Austin has a population of a little more than four thousand people, and no hotels, in the American sense, but lodging houses, with restaurants often quite distant—often in another part of the town. All business transactions here, since the suspension of specie, has been done on a gold basis; if greenbacks are used it is at coin rates.

Here we first meet Pacific Coast life and enterprise. A number of new kinds of people are here—the Mexican, with his pack mules; the Celestials, doing nearly all the domestic labor of the town; also several other nationalities, largely represented, making the population much more mixed—some dressed in their national costume.

Continuing westward by coach from Austin, we cross Ruse River valley, and enter upon one of Nevada's poorest ashen deserts. The disagreeableness of the alkine dust, as of old, envelops horses, vehicle and occupants, a distance of three hundred and twenty miles; but these are now among the rubbish of the past, only to be occasionally remembered.

Most mining towns are thrown loosely along some tortuous ravine; but Virginia City, for a time the

only metropolis of Nevada, looks as if it had grown half way up the side of the mountain, near the limit of vegetation.

I suppose a more forbidding, dreary, desolate spot exists not on the face of the globe, than the site of Virginia City, as it was in 1859. Not a living thing green on the barren desert waste, if you except a few, very few stunted cedar bushes, and Horace Greeley's everlasting sage brush, interspersed by now and then—say, perhaps, ten to the acre—solitary blades of grass; in short, not one attractive, but many repulsive features. Yet, on this naturally miserable spot, whose only redeeming, yet all powerful feature was the mineral hidden beneath its surface, has in a little over four years, risen a magnificent city, rivalling many even very prosperous ones on the Atlantic slope, of ten or even twenty years growth.

The locality is forbidding, treeless and verdureless; and sometimes it would seem that all the storm winds of Heaven were let loose together, by the rapidity with which they sweep through the city—sometimes reminding those pedestrians who stand on slippery places, that we are fearfully and wonderfully made. Two prospectors in pursuit of gold, discovered here in 1859 a vein of dark-colored ore, which, being assayed, proved to be silver.

An unusual rush for the somewhat remarkable re-

gion began; the mine being rich, a city sprung up like Jonah's gourd—not upon a hill, but on the side of one which cannot be hid.

The city is built over its wealth; consists in one very unusual deposit of ore, the celebrated Comstock Ledge, which has proven to be one of the most remarkable deposits of the kind on the Continent—unknown any where else in the world—more a wonderful blow-up or deposit, than a lead.

We go down its shafts many hundred feet; meander through the many drifts on the different levels of the main shaft; saw the toiling miner at work.

There are hundreds of men down here, but the place is so vast you hardly see half a dozen together. You hear a little rumble, and suddenly meet a loaded car, a miner shoving it, his candle stuck in his hat or in an upright of his car; or you come hastily upon two or three men running from a blast which they have just fired; or you hear the picks of a gang down the passage, but you cannot see a man in the gross darkness. When one has stumbled along many hundred feet in various directions, and when the little basins have thoroughly wet one's feet, and the percolating streams have soaked head and shoulders, we are quite willing to go back to daylight and civilization.

We examined the extensive subterranean timber

ing of the mine to prevent its caving, and the machinery requisite to do the immense work. It is estimated that there is more lumber under the town than in the whole City of Virginia above ground. The deposit is from thirty to eighty feet wide, much of it loose, requiring only shoveling up. Some of the richest of the ore has been sent to Swansea, in Wales, for crushing. These mills guarantee to extract all the silver, to the full amount of scientific assay; whereas no mills in the State will agree to return more than eighty per cent. of the assay. The quartz here is more easily reduced than any other in Nevada—it being free from corroding substances, such as the sulphates, pyrites of iron, arsenic, &c.; does not require roasting, like the ore at Austin and most other mining districts, which make about half difference in the milling expenses. The Gold Curry Company took from their claim—within a space of five hundred and fifty feet in length by less than five hundred in depth—Fifteen Million Dollars. The stamps put in opertion here have given larger returns than in any other mining region on this Continent. The Comstock has a constitution of its own, different from most silver mines, but has an increasing and varying richness, like other mines.

A body of ore small at the surface may, at a greater or less depth, expand to a great size—and *vice*

versa. The geological formation of this hill and lead is as singular as its rich ore is rare. Such a formation is very advantageous for mining, as the ore is in vast quantity, pure and rich, and easily mined. The exhaustion of the mine is almost a matter of impossibility, and none now living will see it accomplished. Here began the first silver mining in the United States.

This is the continental belt of the metalliferous deposits, is of vast extent and richness, is about three hundred miles wide, and establishes its geological connection with the historic mines of Mexico and Peru, and extends as far north as the persevering miner has yet prospected. Precisely on this line in the Mexican States, are the great silver mines, which have been worked for three and a half centuries by the Spaniards—furnished the world with large quantities of silver coin and bullion.

This is but a portion of that vast region of the precious metals, extending along the volcanic formation, from the Andes in South America, to the Cascade Mountains in Oregon. The principal mineral wealth of the world has been found in the mountain ranges which look out over the Pacific Ocean.

Nevada is justly called the "Silver State," although her mining is yet in its infancy. The yield is enormous. In the short space of ten years, she has climb-

ed from frowning deserts and forbidding mountains, by silver steps, to a prominent position in the eyes of the world and in the hearts of the American people. These mines will not always go begging; but until they are made productive, they must be suppliant at the throne of capital.

It should be remembered that silver mines, unlike those of gold, require long-continued labor and much capital properly expended, before they yield up their shining treasure. Silver is never found detached like gold. The metal being wholly confined in fossiliferous quartz rock, has to be ground and elaborately worked in costly mills before it can be made available. Geologists agree that quartz leads had their origin far down in the bowels of the earth, and were forcibly ejected from beneath through openings formed by some violent convulsion of nature in the old granite rocks. These crevices are detected, and traced from surface indications. The treatment of galena silver quartz, which is found largely in Mexico and Arizona, and some places in Nevada, is very different from the other kinds; the ore requires smelting instead of stamping.

The largest establishment for working this kind of ore, I visited at Oreanna, on the Humboldt Flats. The ore here contained such a large percentage of lead, that it would form a solid mass when stamped

The smelting furnaces are built very much like those used in our iron froundries. Charcoal is used for fuel. After a fire is started, alternate quantities of ore and coal are put into the furnace; and when melted, is drawn out like molten iron—the silver and lead together, which is molded somewhat like pig-iron.

The only real difficulty of this kind of mining is, separating the small amount of silver from such immense quantities of lead, as there was only about two hundred and fifty dollars in silver to the ton of lead. It was not separated here, but sent at considerable cost to San Francisco for separation. The lead is very pure, equal to the best, as the works are on the line of the railroad, affording better facilities and cheaper freight. The company will, probably, realize largely from the investment. This kind of mining is much cheaper than crushing, and generally give larger return for the money invested.

The Silver Mines of Nevada constitute the great and important source of the wealth of the State.

But ten years have elapsed (scarcely a beginning in this kind of mining) since the discovery of these mines, and the yield is greater at this time than of any other country—Mexico not excepted.

Many desire to know the method of securing a mine. A person supposing he has discovered a lead,

sinks what is termed a prospect-hole upon it; writes a notice setting forth the fact, that the individuals whose names are signed to the notice, claims a certain number of feet on the ledge (giving it some name) in either direction from the prospect, and within ten days thereafter gets the notice recorded, by the Recorder of Claims of the Mining District, together with a description of the lead, and where and how located.

This is the primary source of title to all mines, and answers the same purpose as our deeds of real estate—can be transferred only by recorded deeds, properly acknowledged before a competent officer. The mining laws of all districts give the locator of a lead fifty feet of land on either side of his claim, for the purpose of erecting machinery if he wishes, and to do general work upon it. Most districts require the owner of a lead to do a specified amount of labor on his claim per month, or forfeit it; where others can, as it is termed, "jump it."

CHAPTER XXXVI.

JOURNEY TO THE HOT SPRINGS.

We left the Overland Stage road at Cold Spring station and started for a journey to the Sink of the Humboldt, distant one hundred and twenty miles to the northward. Our road conducted us over a very dry, forbidding region, of which Nevada has so much; a sand and rocky desert all the way. Nothing could be seen of vegetable growth but the ubiquitous sage, and that only at long distances. The first half day we traveled twenty-four miles, to Indian Spring, where we found a small quantity of water, as if trying to hide itself away in a little pool at the foot of a mountain. No more than enough could be had at a time than to supply a team and a couple of men. Here was our dining hotel, the traveler's very hospitable home. We were the only proprietors for the time. A little dry fuel was soon collected, coffee boiled, bacon in the frying-pan, and bread on hand. The table-cloth (a newspaper) was laid for two, and we sat down upon the table which nature furnished, to rather a young feast, when we consider the poverty-stricken country. Somewhat rested, and our horses recruited with a few

blades of alkali grass about the spring, but with more barley, with which we had supplied ourselves at twelve cents per pound, coin, we resumed our journey and traveled twenty miles to the Hot Springs, and camped for the night. The traveler's heart rejoices when he comes to one of these life-giving places, nearly famished with heat and thirst.

No one can appreciate the suffering to people and animals which often occurs while traveling over portions of this country in summer.

We stop on the way to examine a salt marsh, of which the State has several. This is the largest and the purest salt. Here, in a basin, between the mountain ranges, is about ten acres, covered with coarse salt—quite a good article—nature's salt works. Planks are laid down, and men, with wheelbarrows, shovel it up where found the thickest and the best, and wheel it out where wagons can take on a load. It is put in coarse sacks of a hundred pounds or more each, and sent off for family use and for quartz mills, as but little ore can be successfully treated without it. Very much of the quartz mining would be a failure were it not that this indispensable article is found largely in this mining part of the continent. Freighters were here loading for the distant mines of Idaho and Montana. Large quantities are carted over the country from here in

all directions. Where salt is removed from the bed brine again fills the place, and in a few days, during the summer, evaporation is so great that salt is soon formed as before, ready to be removed again.

For the purpose of saying all that we design to on this subject here, we will digress, and introduce you to a mountain of salt about two hundred and thirty miles from here, in the southern part of Nevada. It is between four and five miles in length and nearly six hundred feet in hight, with an unknown depth. It is pure and crystaline, and does not deliquesce on being exposed to the atmosphere, but is more like rock, requiring blasting to remove it from the very solid mass, whence it is taken in large blocks, and is as transparent as so much glass. The world could be supplied from here if it could be transported; but it is a long way inland—located in a wilderness—an object for the admiration of the traveler and the inspection of the scientific. There is but one other known place on the globe where salt is found in such a state of purity in quantity, and that is in Poland. Should any of my readers desire to see a specimen of it, they can do so by calling on me.

But to return to the Hot Springs. There is about a dozen of these caldrons filled with water, but not

running over. In one we found water cool enough to drink; another tepid, in which we had a delicious renovating bath; another moderately hot, but not scalding to hold the hand into it. Others were so hot that we tied some meat to a string and boiled it in a very short time. There being no son of Vulcan present, and one of our wagon tires was in a favorable way to come off, we attached a rope to it, and also gave the wheel a good boiling, which answered us as well as a blacksmith for the journey. Washerwomen would have no trouble to supply themselves with ready water here to do a very big washing, and men would not be driven so far away from home as they sometimes are on that ever to be remembered day.

These springs vary in width from five to thirty feet in diameter. Some are shallow; others no doubt are very deep, being supplied far down in the earth.

We spread our blankets amongst the boiling pools and had a delightful sleep. The steam and gas arising, together with the warm earth, warmed the air and invited repose. It was unusually interesting at early morning to observe the ascending columns of steam which at that time arose in clouds to a great hight as the day seemed to kindle behind the eastern mountains, and as the sun ascended over

them they appeared to rise from beds of flame and to put sheets of fire upon their majestic ærial heads.

We continue on over the country where universal desolation was stamped upon all around. It would almost seem in some places that nature herself had quite expired, so remarkable was the sterility and dreariness. A hot, yellow haze hung upon distant objects, while a sort of dazzling, glittering heat seemed to surround everything near at hand. Some of the road was too dreary to be spoken of—yellow sand, with a few rocks rising above the plain, with an occasional cluster of artemisia.

The bitter imprecations of many a maddened and almost frenzied emigrant were poured out with startling energy and emphasis upon this treacherous portion of the country, as many thousands of the bones of their poor animals were scattered all across this forty miles of burning sun, waterless, alkali, Humboldt Flat. I found no place on the Overland Route where the emigrant had left so much along the way to remind one of these plains of death to their animals, and a consequent loss of other property, when "Hopes and fears in more than equal balance laid," while they toiled on amid great suffering.

We traveled some distance along this old emigrant road and then turned south to Humboldt River, then

followed it down to near the Sink and crossed over to the Carson River, (named after the celebrated Carson, guide and mountain man,) passed round to the south side of the Sink and returned to the stage road again.

These two great rivers, flowing eastward from the Sierras, form a large lake on the desert called the Sink, as they are both lost in this, their reservoir. The railroad runs on the south side of it, and the country has been considerably taken up, and is beginning to be settled by an agricultural people, as the lake furnishes irrigating facilities, and the country for some distance is favorably located for the business.

It was supposed by the first settlers of Nevada that the country must be infinitely rich in minerals, because worthless for anything else; but experience has proven that the many before desert valleys have large agricultural capacity by the introduction of water, and the State will become self-supporting, but her leading interest will be silver mining.

Carson City, the capital of the State, is pleasantly located in Carson Valley, sixteen miles from Virginia, under the shadow of the Sierras.

Carson Valley is the largest and most productive farming region of the State, and is now capable of supporting a large population and supplying other sections to some extent.

Nevada is prolific in hot springs. One near Virginia, a mile long, following the course of a little brook, has sulphur water boiling under ground, breaking through in some places and throwing up jets of water and steam. At one place a fountain rises from the ground several feet high, making a sound like a high-pressure steamer; consequently all the waters are named the "Steamboat Springs." The water is similar to the Sulphur Springs at Salt Lake, possesses curative virtue, and is quite efficacious in rheumatism.

The Indians reverence these springs. They believe that the Great Spirit troubles the waters by breathing in them, and they make propitiatory offerings to this supposed invisible deity.

CHAPTER XXXVII.

SIERRA NEVADA MOUNTAINS—LAKE TAHOE—DONNER LAKE—SUFFERING OF EMIGRANTS—SACRAMENTO.

After having been so long on the interior desert plains and forbidding mountains, from majestic forests and nature's growing beauties, we confronted with renewed pleasure in the ride up the mountains a succession of delights and pleasures, thirteen miles from Carson to Lake Tahoe. The surging of the Pacific breeze through the massive trees of magnificent size and beautiful form, the "Æolean Harp" of the mighty forest, came like sweet music laden with recollections of home and friends.

The air was sweet with fresh perfumes, the eye beheld green valleys, and feasted on new mountains of rock and lower hills covered with dense evergreens, when we arrived at the Glenbrook House, beside the most beautiful sheet of water (as some have said) in the United States.

Tahoe is said to be the highest lake on the globe, navigated by a steamboat, (a little pleasure steamer for the use of guests of the house) as it is already becoming a pleasure resort of Californians in summer. The cool, healthful air, magnificent scenery,

together with an unlimited supply of delicious lake trout, make the place one of pleasure and health. The lake is twenty-four miles long, and is from twelve to fifteen wide, and six thousand two hundred and eighteen feet above the sea; walled in by mountain ranges thousands of feet high, with peaks standing as sentinels, reflecting their majestic greatness in the transparent water. It seems as crystaline as if the water were air. Substances of a small size can be seen with distinctness on the bottom at a depth of a hundred feet. In places it has been found to be sixteen hundred feet deep. The irregular line dividing the green of the shallow waters from the blue of the depths is clearly marked. The shores are mostly covered by shining black sand.

The line crosses the lake, dividing the Golden and the Silver State, and is a place of unsurpassed magnificence and beauty, only fifteen miles from the railroad, which makes it quite accessible for those wishing to visit it. No one who can will regret seeing this brightest jewel in the mountain coronet.

There are several small lakes in the mountains about here which are not less than seven thousand feet above the ocean. Lake Como is one literally amongst the tops of the mountains, fourteen miles long and nine miles wide, and walled in by volcanic debris.

As the traveler now on the Sierra Nevada looks from the swiftly moving, pleasure-giving cars, he will see a beautiful little lake on the north side of the track, about sixteen hundred feet below him, serene, blue and beautiful, five miles long by one wide. It is "Donner Lake." Here, nearly twenty-one years ago, an emigrant train of fifty men and thirty women and children, encamped on the shore of this lake late in the fall, under the leadership of a man by the name of Donner. A very heavy fall of snow, said to have been twenty feet in depth, shut them in the canyon and prevented their advance or retreat. As their cattle died they ate them to the very last piece of their hide. Then starvation came upon them with maddening power; they could scarcely wait for one of their unfortunate number to die before the body was consumed.

From cabin to cabin exchanges of parts of the human body were made, and a return to be given when the next one died. I was informed that one of the women is now living who ate her own husband.

For the benefit of the believer and the unbeliever in dreams, we give the following:

During this time, as we are told, there lived near San Francisco an old hunter. He dreamed that there was such an emigrant party starving and dy-

ing in the mountains. So firmly was he impressed with the dream, that next day he went twenty odd miles to see another old hunter. In describing his dream, he pictured the place so plainly that the hunter recognized it as being the place afterwards known as Donner's Lake. They organized a small party and started immediately, through the deep snows, and found the party—exactly according to the dream—and thirty out of the eighty were rescued, though some of them were badly frozen and crippled for life.

During this terrible time they became so besotted, that when found, with parts of their undevoured friends around them, like wild animals that have once tasted human flesh, they had to be literally forced away from this kind of living, and most reluctantly took the food which their deliverers brought. It is said that one of them was found cooking human flesh, besmeared with its blood after he had been supplied. It was supposed he had committed murder in order to have one more feast.

As we looked down from the beautiful cars, with every want supplied and every wish anticipated, upon that historic and picturesque spot in the summer, where these poor emigrants suffered all that humanity could suffer, and died in such a heart-sickening way, we could not release ourself from the sad im-

pression which this most terrible item in the history of those times made upon the mind.

Crossing the summit, we were among bare, granite peaks of white, gray and brown. The majestic Sierras rear their snow-capped summits, where king winter holds his eternal court. Their long sides, furrowed with dark, deep canyons, through which bright-glowing rivulets leap down the abrupt mountain-sides, carrying to life and nature in the plain below the tribute of that icy court above. They remind one of the beautiful conceit of the Spanish poet, that a brook is the laugh of the mountain.

We pass along amid granite walls on the vast mountain sides, hundreds of feet above and below us, some places so upright that from the summit a stone could have been dropped hundreds of feet upon our heads; while we could look thousands of feet down the nearly perpendicular side below us.

Among the many objects of grandeur and beauty which feasted our eyes as we passed down the Pacific slope, through the most magnificent forest of pine, red-wood and firs in the world, we beheld fifteen hundred feet below us a silvery section of the American River, with delicious green grass sloping down to it on all sides, with the most perfect symmetry.

As seen through the massive trees, it presented the rarest picture in a tree-frame of unrivaled ver-

dure. No part of our journeying over the Continent gave richer or greater variety of experience, more grand beauty of landscape, more extraordinary knowledge, more pleasure than over these remarkable mountain ranges. We pass the vast and lofty mountains; we are among the beautifully rounded foot-hills in the bewitching valleys that sleep beneath these lofty mountains, within whose dark recesses is earth's banking-house; within them are hidden the sleeping gold and silver, a mineral wealth which no one will presume to estimate.

Already from them have been carried away millions of shining gold, which has entered all the avenues of trade, and brought independence to many a before poor home.

But California may bid adieu to those who were lured to her by dreams of sudden fortune—to the golden days of the past—as she has built upon the sure foundations of exhaustless agricultural resources an empire to endure while there shall be seed time and harvest. The mountain streams, which a few years ago the gold hunter conducted among the lower hills to wash out grains of gold, are now applied to the parched earth, and give certain return in streams of wine and rich harvests.

After our long travels over mountain and desert, these pleasant valley-homes, embowered with trees,

festooning vines and flowers, seemed more wonderfully beautiful than ever before. Another kind of beauty and wonder now feasted our eyes, among the western foot-hills of the Sierras—once more among life's common beauties and blessings—every-day comforts, where the symmetrical hills were clothed with a wealth of trees, shrubs and grass, sloped down to the mountain brook into the bottom of the valley, presenting landscape pictures of unrivaled extent and verdure.

A few hours' ride on the iron-horse took us to Sacramento, the head of tide water, on the river of the same name, one hundred and twenty miles above its mouth. The summit line of the Sierras from here is seventy-five miles east of the city; and in winter the snow-capped mountains can be seen for a distance, stretching two hundred miles from north to south. We had not lost sight of the snowy mountains, only at short intervals, for over a year, since we first saw them sixteen hundred miles back on the plains before reaching Denver.

Sacramento is the Capital of the State, and the new State Buildings, which are now completed, are imposing, and do honor to the enterprising people of the Golden State. Although the city has been repeatedly nearly destroyed by conflagrations and submerged by freshets—which hindered to some ex-

tent the early growth of the place—yet the city went on increasing in wealth and population, so that now it is the second city on the Pacific coast. Levees now protect the city from overflow, like those of New Orleans, and the grade is mostly changed, to afford sure and permanent protection.

The city is beautifully shaded, though quite warm in summer; is agreeable, and contains much to admire of wealth and culture; lures every visitor by its profusion of fruit, hanging with blushing cheeks under shelter of the trailing vines, while they pencil their summer romances up to and over the eaves of the houses.

CHAPTER XXXVIII.

FLOWERS.

We found no place West of the Missouri River, with such a wreath of blooming and luxuriant beauty of flowers and trailing vines as Sacramento. The city is made attractive by the gratification which their presence affords. We had companionship with such a floral Eden no where else in all our travel as here. The place seems to be located where Nature is wonderfully lavish in her remarkable growth of life's pleasures and necessities.

In our extended journeyings, occasionally would be found in little park openings on mountain sides near last year's snows, in valleys and on desert plains, a variety of wild flowers, many times on sandy wastes, where nothing else could grow but the wild sage. Yet, during the season of them, on the plains and in all the great interior mountain country, flower gardens quite beautiful may be seen in their isolation and simplicity, scattered among them in different stages of growth and decay, in June, July and August.

In the mountains and parks of Colorado, we found a large variety of small flowers and roses, such as buttercups, dandelions, larkspurs, hairbells, painter's

brush and blue gentian, with their various companions of spring, summer and fall, improving every hour of sunshine in their brief lives. They looked as happy and emitted their little fragrance as freely, as though they were in the midst of civilization. Blue and yellow are the principal colors—several varieties of the former—round and trumpet-shaped blossoms pendant on stalks; again a similar-shaped flower still smaller; a little round flower in pink and white, known only here, and of a yellow hue. There are babies and grand-babies of the sun-flower family in every shade. Some of these are about the size of a tea-saucer, with a centre stem of richest red, with deep yellow leaves hanging away from it—each color the very concentration of itself, as if dyed at the original fountain head.

We found the hair-bell at home everywhere, standing alone on the mountain sides, occasionally at an elevation of eleven or twelve hundred feet, as well as in the valleys and guarded parks, in its glory among all its rivals; but the fringed gentian is more particular—grows only in low, rich ground. The painter's brush, so called here, stands distinct on a single low stalk, about three inches in length, and one inch in thickness of flower or diameter, in every shade of red, from deepest crimson to pale pink, and in straw colors from white to lemon. The most attractive

flower I noticed in the Rocky Mountains, was columbine, generous but delicate, of pure white, exquisite in form and coloring.

The traveler will find amid the almost utter desolation of desert and mountain over this country, nature's little gardens of floral beauty, the ground white, red and purple, pocket editions of poetry in velvet and gold, modestly turning up their beautiful little faces to the sun, which must fall silently and unobserved, in coming time as in the past. If my space permitted, I should be glad to give a full description of these many little beauties, for the benefit of my flower-learned readers.

High up on the mountains, where nothing can grow but the mosses, these are covered with a variety and richness of flowers, with white, blue and pink blossoms. No large section of country can be found, even in these vast regions, so barren as not to have a flower. In the poorest portions would be sometimes found a wealth of flowers—the otherwise naked sand-gravel nearly carpeted in places with these little flowers, presenting their smiling faces to the scorching sun.

This wealth of flowers has strength, but not coarseness. The colors are more deep and delicate than those in our flower gardens; and, although frosts may freeze them every night on the mountains, yet

the dryness of the air preserves them through the season, and they continue on growing and flowering until winter freezes them out.

Many species of Cactus are found in Colorado, New Mexico and Arizona, which are quite beautiful when in flower. In the two latter places they grow very large, and horses sometimes get the sharp thorns in their ankles, and are ruined in consequence. But in California, they grow eight and ten feet high—a wonderful size for the kind.

There is also another plant found extensively through these same countries, known as the soap-plant, grows very stout, and has a long tap-root, enabling it to grow in the dryest country; has wide, long, thick leaves, possesses soapy properties, and is used in the absence of the real article for washing purposes.

Flowers abound in all directions in Portland. Acres of verbenas, geraniums, fuchsias, mignonette, tube roses, coronations, superb lilies, and many other kinds, together with English ivies overrunning house fronts, trumpet flowers and columbine, seem to cover everything. The houses were steeped in the fragrance of the roses and odorous vines that crawl in over every door and window sill.

The city is a wealth of floral beauty seven months of the year. The profusion and intenseness of this

floral life seems not so much the adornments of the place as it is of Portland. But the cities of California and pleasant valley homes, embowered with trees, flowers and festooning vines, are more to be admired, more wonderfully beautiful than can be found elsewhere on this continent. Here the lemon verbena is a hot house plant; there it is a bush several feet high. Here you will see an oleander beautifying a parlor; there you will find hundreds of bunches in some yards in full blossom among what looks like showers of roses. No one can visit this sunset land without feeling the magic influence of flowers stealing insensibly over him.

"God might have bidden the earth bring forth
Enough for great and small,
The oak-tree and the cedar-tree
Without a flower at all.

We might have had enough, enough
For every want of ours,
For luxury, medicine, and toil
And yet have had no flowers.

The ore within the mountain mine
Requireth none to grow;
Nor doth it need the lotus-flower
To make the river flow.

The clouds might give abundant rain,
The nightly dews might fall,
And the herb that giveth life to man
Might yet have drunk them all.

Then wherefore, wherefore were they made,
All dyed with rainbow light:
All fashioned with exquisite grace,
Upspringing day and night:

Blooming in valleys green and low,
And on the mountains high,
And in the silent wilderness,
Where no man passes by?

Our outward life requires them not,
Then wherefore had they birth?
To minister delight to man,
To beautify the earth:

To comfort man—to whisper hope,
Whene'er his faith is dim;
For who so careth for the flowers
Will much more care for him!"

CHAPTER XXXIX.

MAMMOTH TREE GROVE.

It is easy to doubt or disbelieve the traveler who describes objects which he has seen that are unlike our own experience; he may have been credulous and imposed upon, or wishing to make himself a hero, is tempted to exaggerate.

I am now about to write of the most stupendous vegitable growth, and no doubt the oldest existing upon the globe, the truth of which I hope will be tested hereafter by many of my readers.

On our way over the mountains, through the very heavy forest, we stopped to measure some trees be side the road. The first and largest one we had seen measured eighteen feet in circumference, but as we passed on a few miles we came to one which measured twenty-two feet in circumference. Then we saw many more equally as large, whose hight was from two hundred and fifty to three hundred feet. These are the common sugar pines of the region, which became very celebrated on account of their remarkable growth, before the discovery of the "Big Trees" of California in 1852; a hunter having wounded a bear, which he followed to these most

wonderful trees, then made it known. While he gazed in astonishment his wounded bear escaped, and he returned to camp.

His story was received with laughter and derision. But soon after, on another hunting excursion, he lead several of his companions over mountains and through gorges, till they were among "the big trees," and were convinced of the truthfulness of their companion.

No visitor of California should fail to see these trees. They have attracted pilgrims from the Old World, and their fame has already gone over the globe, and titled men and ladies have viewed them with wonder. There seems to be no convincing theory of their origin; century-looking minerets, towering up in grand unconsciousness, impressing the beholder with the feeling of a growth, long ago, of some other world.

> "In fact there's nothing that keeps its youth,
> So far as I know, but a tree and truth."

These *sequoia* gigantea are the world's patriarchs. Some botanists place their origin back of human history. By counting the concentric circles in a tree, we found some of the largest trees to count three thousand, making them as many years old. No one can estimate the age of the largest at less than eighteen hundred years. Perhaps their youth

saw the humble carpenter of Judea, a man of sorrows and acquainted with grief, despised and rejected of men.

On arriving at the trees you find a beautiful piece of moist, rich table-land four thousand five hundred feet above sea level, two thousand feet of which is made in the last few miles of the road. The grove is a place exceedingly beautiful—a grand old forest away from the world's highway, in the midst of the mountain tops of the Sierras, in central Calaveras county, is the most accessible, and the most beautiful of any of the big tree groves in California.

From Stockton, at the head of steamboat navigation, it is in a staight line 70 miles to the trees; but by the stage road, through Copperopolis, 75 miles. This is the route taken from San Francisco and the Bay region to reach the grove.

The traveler, on arriving at the Grove Hotel, will find himself surrounded with the comforts of a good traveler's home, which invites him to stop his wanderings for a time to receive the enjoyments this remarkable place presents.

Many of these trees, perhaps a quarter in the grove, will measure twenty-five feet in diameter—very many that are thirty feet, and I measured several that were thirty-three feet in diameter. Nearly in front of the hotel one of the largest trees was

felled in 1854, which was perfectly sound the whole distance through, thirty-three feet. Five men worked twenty-five days with pump-augers, before they could get it down. The stump is five feet from the ground, has a house built over it, and easily accommodates four quadrille sets of dancers, musicians, and a few spectators at a time. Theatrical performances have been held upon it, and a few years ago a newspaper, *The Big Tree Bulletin*, was printed there.

Near the stump lies a section of the trunk twenty-five feet in diameter and twenty feet long, which you can mount only by wood steps, twenty-eight in number, and long ones too. About thirty feet of the trunk has been taken out to supply visitors with canes and other specimens of the wood. Beyond lies the immense trunk as it fell, measuring 302 feet from the base of the stump to its extremity. Upon this was situated a bar-room and ten-pin alley, stretching along its upper surface for a distance of eighty-one feet, affording ample space for two alley beds side by side. If you wish to get an idea of the diameter of this tree, measure off thirty-three feet, and see where there is a room as large as the diameter of that tree.

About eighty feet from this stump stands the "Two Sentinels," each over 300 feet high, and the larger

twenty-three feet in diameter. The carriage road approaching the hotel passes directly between them.

Starting from the hotel for the walk that visitors usually take, we soon came to the first cluster of the *sequoias*, and were named respectively in 1865, U. S. Grant, W. T. Sherman and J. B. McPherson —after three leading Generals of the Union Army.

A short distance from these is the "Pride of the Forest." It is eighteen feet in diameter and three hundred feet high—one of the healthiest and noblest trees in the forest.

Near by stands "Phil Sheridan," a stout, graceful tree, three hundred feet high, and near this lies the "Miner's Cabin," which was blown down a few years ago by a terrific gale in 1860. It is three hundred and nineteen feet long and twenty-one and a half feet in diameter.

About two hundred feet east of the "Miner's Cabin" brings us to the "Three Graces," a group of three trees close together, regarded by many as the most beautiful cluster in the grove.

A little distance from these stands "Andrew Johnson," so named in the summer of 1865. Making this tree a central point of observation, we have several magnificent trees within a short distance; one bearing the name of that Philanthropic English lady, Florence "Nightingale;" another named "Bay

State;" another named "W. H. Seward;" and also one named "W. C. Bryant," so named by a lady admirer of that distinguished poet.

In the center of the grove is a tree two hundred and eighty feet high, seventeen feet in diameter, singularly hollowed out by fire, and named "Pluto's Chimney." The "chimney" made by the fire extends from the ground ninety feet upwards.

Near this tree is the "Quartette" cluster, the highest of which is two hundred and twenty feet; a few yards from these is a very healthy young tree two hundred and eighty feet high, named by a San Francisco lady, "America." Its constitution appears vigorous and healthy. It has been well named.

Two large trees, one on the right, the other on the left of the path, nearly opposite, are "California" and "Broderick." The next tree is "Henry Ward Beecher," two hundred and eighty feet high and fourteen feet in diameter.

A few steps farther brings us to the "Fallen Monarch," which has to all appearances been down for centuries. It is still eighteen feet in diameter, though much of the wood has been washed away by time. What is left is sound. But the upper half or two-thirds, which struck the earth with great force in its fall, has all disappeared, and trees a century old are growing where it struck. This tree

must have been over three hundred feet high and twenty-five feet in diameter.

Fifty paces from this is a cluster of twelve trees, in size of the second class, averaging fifteen feet in diameter and two hundred and eighty feet in hight. One eighteen feet in diameter and three hundred and twenty feet high, named "Abraham Lincoln;" and others named "Gen. Wadsworth," "Uncle Sam," "Union," &c.

The "Mother of the Forest," has been stripped of her bark for upwards of one hundred and sixteen feet from the ground, which was sent to England. It is of course dead, and the top limbs are beginning to fall. Near the top a small tree has taken root in the body of the "Mother," and is apparently intent on coming to something.

This tree is three hundred and twenty-seven feet high; and without the bark seventy-eight feet in circumference.

A few rods from this is "Gen. Sutter," which, dividing thirty feet from the ground, forms two distinct trees, each two hundred and eighty feet high.

Also, near this is the "Trinity"—three trees growing from one trunk. The circumference below the divergence is sixty feet.

One hundred feet from "Longfellow," brings us amidst the family group. Standing near the uproot-

ed base of the "Father of the Forest," the scene is grand and beautiful. The Father long since laid his body on the ground. Yet, stupendous in his ruin, he measures one hundred and twelve feet in circumference at the base, and can be traced three hundred feet. Where the trunk was broken by falling against another tree, it here measures sixteen feet in diameter, and according to the average taper of the other trees, must have been four hundred and fifty feet in hight when standing. A hollow cavity extends through the trunk two hundred feet—large enough for a person to ride through on horseback!

Walking upon the trunk, and looking from its uprooted base, the mind can hardly conceive its dimensions; while on either side tower his giant sons and daughters, forming the most impressive scene in the forest.

Next we come to a cluster of three trees, named "Starr King," "Richard Cobden" and John Bright." "Starr King" is the highest standing tree in the grove, three hundred and sixty-six feet. "Daniel O'Connell" and "Edward Everett" stand next. They are young trees, eight or nine hundred years old, and very vigorous.

Near the "Father" are "James King," of William. "Keystone State," "Sir John Franklin," "Dr. Kane," and the "Century," so named after the "Century

Club," of New York, of which Bryant is President. Close to these stand three of the largest size trees, the "Keystone," "Lafayette" and "F. F. Low."

"Hercules" stretches his huge body across the path. This was the largest tree standing in the grove until '62, when during a severe storm it fell. It is three hundred and twenty-five feet long and ninety-nine feet in circumference. When standing, this tree leaned about sixty feet from perpendicular. Most all of them have nearly a perfect equilibrium. "Joseph Hooker," "Humboldt," and some smaller trees, stand together on the slope of the hill, near the broken top of "Hercules."

Not far from these lies the "Old Maid," which fell towards her friend, the "Old Bachelor," in 1865, badly broken to pieces, while he looks as healthy and unconcerned as though no misfortune had befallen his friend. The "Siamese Twins," "Daniel Webster," "Granite State," "Old Republican," "Henry Clay," "Andrew Johnson," "Vermont," "Empire State," "Old Dominion," "George Washington," and "Uncle Tom's Cabin," are all first-class trees, from twenty to thirty feet in diameter, and from two hundred and fifty to three hundred and twenty-five feet in hight. All the trees named have a small slab of white marble, with the name engraven thereon, fastened to the trunk about twenty feet from the ground.

In this grove observation will detect a number of young trees, say from ten to three hundred years old, and from forty to two hundred feet high. They are growing finely and promise, barring accidents of wind and fire, to be well brought up middle-aged trees of their kind, in about a thousand or fifteen hundred years. Many of these trees have been badly injured by the Indians building their fires against them in former years. We are indignant at the stupidity which could see nothing in those trees but a big back-log for their fires.

These trees are the only living monuments that connect us with olden time. Perhaps before Old Rome was planted on the hills, certainly long before any man imagined this Continent, these youthful trees were lifting their noble forms in these far-away mountain solitudes, to be ready for eyes that would appreciate them in the Nineteenth Century.

"These giant trees, in silent majesty,
Like pillars stand 'neath heaven's mighty dome;
'Twould seem that, perched upon their topmost branch,
With outstretched finger, man might touch the stars.
Yet, could he gain that hight, the boundless sky
Were still as far beyond his utmost reach
As from the burrowing toilers in a mine;
Their age unknown, into what depths of time
Might Fancy wander sportively, and deem
Some monarch-father of this grove set forth
His tiny shoot, when the primeval flood
Receded from the old and changed earth.

Perhaps, coeval with Assyrian kings,
His branches in dominion spread! From age
To age his sappling heirs with empires grew,
When Time those patriarch's leafy tresses strewed
Upon the earth; when Art and Science slept,
And ruthless hordes drove back Improvement's stream,
Their sturdy head-tops throve, and in their turn
Rose when Columbus gave to Spain a world.
How many races, savage and refined,
Have dwelt beneath their shelter! Who shall say?
(If hands irreverent molest them not.)
But they may shadow mighty cities, reared
E'en at their roots, in centuries to come,
Till with the everlasting hills they bow
When time shall be no longer."

Never before had we seen long centuries of time stamped upon trees; never before did we so fully appreciate such forms of greatness, and grandeur that humbles; never before had we stood beside living age, so wonderfully embodied. One feels as though he expected to see the mighty Power that has upheld these wonders visible upon them.

I would advise all travelers who are in San Francisco, or have an opportunity to send for them, to procure some photographs of the Big Trees. They will, on your possessing them, become a source of much enjoyment.

CHAPTER XL.

YOSEMITE VALLEY.

Leave the city of San Francisco in the evening boat for Stockton, a beautiful sail while it is day and you are on deck, and arrive at Stockton at six o'clock next morning. From here there are two routes to the valley by stage—one to the north to the Caleveras big tree grove, and the other more to the south. But I am at Mr. Perry's comfortable hotel, among the giant trees, and leave in the morning and go to "Murphy's Camp;" dine and press on, crossing the rapid Stonislous River and remarkable mountain gorges to Sonora, amid the amazing relics of the miners. Remaining here over night, in the morning pass on through the "Chinese Camp," cross Tuolumne River, ascend and descend mountains, till we arrive at Harding's ranch, where you must take the saddle.

Now get the best horse you can, and with a guide start off, with good courage, for an unusual hard day's ride in the saddle. We have a hard-riding, but very sure-footed animal, when we leave the world's hard-trodden highway and enter the forests, ascend vast mountains, go through gorges and down

long ridges, admire myriads of the most beautiful trees the eye ever saw, pass over leads of snow on the highest mountains for miles, (in mid-summer,) then perhaps through parks of Nature's planting. We move on, seldom faster than a walk, till we have had twenty-five long, weary miles' ride, when we look down from the summit of the mountain—three thousand feet into a valley—which is four thousand and seventy-five feet above the sea.

About two hundred miles easterly from San Francisco, and not far from the summit of the snow-capped Nevada Mountains, are some of the most remarkable depressions, gorges and canyons ever found.

While we are looking down the most wonderful one of them all, we pause, admire, and hold our breath. The place is so unlike any other in matchless grandeur, that we feel the pulse-beatings of Omnipotent power. We are looking east, and at our right hand is an opening through immense perpendicular walls, only wide enough for a foaming river to dash out. The canyon looks as if the great mountains had just opened to let the river through, and you almost expect to see them come together again. Very high up, between the rock walls over the valley, is suspended in mid-air the thinnest possible veil of mist caused by the falling waters. This is "Yosemite Valley."

We begin to descend; the hill is so steep that the path must be zigzag, and so fearful to unsteady nerves that you must walk the most of the distance. Sometimes the path crosses a mountain stream, furiously dashing along its rock-worn channel, now on the very brink of frightful precipices, where, should a single misstep be made out of the way on the precipitous side, one would fall, in some places, two thousand feet before stopping.

We have now come down three thousand feet in two and a half miles, over numberless loose rocks and ledges and turbulent water, (where the faithful horse's legs ought to be well insured,) to the bottom of the valley, about eight miles long, and from a half to one mile wide, with a crystal river, the "Merced," (daughter of the eternal snows farther east,) from fifty to seventy feet wide, and from eight to twelve feet deep, and falling some fifty feet during its passage in the valley. No adequate description of the place can be given, such as will give you a correct idea of its unsurpassed wonders of admiration. Like some few remarkable places in nature, it must be seen to be appreciated.

Imagine yourself in a canyon, inaccessible save at one place, with massive perpendicular walls lifted up a mile high, eight miles long and half a mile wide, and you have a basin a mile deep, while the

country outside of these nature-masoned walls is at least a mile higher. This rocky basin has been slowly assuming its present form for many long centuries past.

Some miles east of the head of the basin lie the great mountain ranges, where snows annually fall and melt. The waters wear a channel till they find the head of this, their reservoir, and then dash themselves down into it. Also other rivers (there are no creeks in this country as with us) are formed, push away the barriers and leap headlong into the basin. The rains and the frosts assist the many streams to wear away the rocks on all sides, till the hardest portions are left perpendicular or rounded over into polished domes, or standing in spires, like those of an old cathedral. The debris of the rocks washes down in the course of time, and forms piles from two to four hundred feet high, and making a soil at the bottom of the basin. Thus it is gradually filled up, the river is raised, trees and grass grow, and so we now find it—the walled picturesque valley—whose sides are all rock, which, we are told, that if these rocks should fall together at the same moment and come together in the middle, there would be an arch over the valley a half a mile high; but who can realize it? There is nothing but the dome of heaven by which to make comparison.

Should you look at the trees, two hundred feet high, they look like shrubs.

We have no means by which to measure distance, to tell one thousand feet from three thousand feet. We feel a disappointment that things in the valley appear small when they are of unusual size.

We are now in the western end of the valley going east, the waters of the river meeting us. We find, as we move up the valley, ten high summits on the sides, quite prominent, peculiar and dissimilar. We also find several large streams dashing down in different places, and smaller ones, that come down like satin ribbons. It is July, when the snows are rapidly melting, the streams falling, and the falls the grandest of the year.

The first one we come to is "Tall and Slender Fall," which first creeps, then rushes down the face of rocks three thousand three hundred feet.

We gaze at the ribbon on the rock, then the stream we cross, and are surprised at the amount of water coming down in that little stream.

As we go on up the valley we behold a mighty pyramid rising up on our left—the "Great Chief of the Valley"—three thousand three hundred feet high, top-flat and naked. We stand at its base and gaze upon it, perpendicular for two thousand feet, feeling that the great mass is ready to fall upon us;

but it is so solid and hard that you soon feel, however, that it might be the corner-stone of a world.

Nearly opposite, on the south side of the valley, is "Bridal Vail," a most exquisitely beautiful sheet of water, falling nine hundred and fifty feet, dashing and foaming, throwing out showers of snowy rockets as it falls into its great rocky caldron; properly called the "Bridal Vail," from its flowing, feathery-gauze-like covering, as though trying to conceal the blushing face and form of beauty. The stream is large, and out of the much spray that is caused by dashing down upon the boulders the sun weaves and hangs over the abyss the most beautiful rainbows.

A little distance from here are the "Three Graces," large masses of rocks standing far up into the clouds, and farther on are the "Cathedral Spires," which, at so great a distance, look not much larger than men, but they are hundreds of feet high.

Next come the great "Cathedral Rocks," having the appearance of round watch towers of some vast building.

Passing on we come to the "Three Brothers," three mountain summits, very remarkable, which are not easily described, but when seen will never be

forgotten. On the opposite side of the valley are the "Three Sisters," most graceful in beauty, as if chiseled by human hands.

We are now in the centre of the valley going east. On our left are Yosemite Falls, divided into three falls—the first, sixteen hundred and fifty feet perpendicular; the second four hundred and fifty, and the third six hundred and forty feet. Yo-Sem-i-te is the Indian name now given to the valley, and means Grizzly Bear.

Opposite these falls is "Sentinel Rock," three thousand two hundred and seventy-five feet high. At the base of this wonderful rock, is "Heeching's Hotel," where all who visit here must stay, and where all will be made comfortable and happy with such a host and hostess in such a place. Here you hear, day and night, the roar of the greatest waterfall in the world, as to distance. We get up at night to admire and never get weary contemplating its magnificence. I was told that in winter the spray freezes and piles up till there is a hollow pillar hundreds of feet high, which, when the spring floods come, struggles with giant power for a time, but soon loses its stronghold, the ice mountains give way, and falls into fragments, when the cataract begins again its thundering song for another year. This foaming river, pouring down the first falls nine times higher

than Niagara, seems to the eye from the bottom of the valley to be not more than two feet wide at the top, but is said to be over forty feet. The river made by it at the bridge is forty feet wide and over seven deep. As we go up towards the head, the valley divides into two canyons, through which the two branches of the Merced run, uniting at the foot of the great bluff, which has the appearance of pushing down the valley between them.

We ascend the right hand canyon, following up the river on foot along its boiling, leaping water, till we come to "Vernal Falls," where the spray soon drenches us to the skin, while the most beautiful little rainbows are hovering and playing around us. We are at the foot of the falls, two thousand feet higher than where we entered the valley. These magnificent falls, the largest of all as to quantity of water, are something over three hundred and fifty feet high, which are ascended by a mysterious looking ladder, fastened to the perpendicular side of the rock, which has the appearance of hanging in the air. If you have nerves of steel, you may go up safely and congratulate yourself on courage, otherwise you had better not undertake it.

We now go up the river half a mile to "Nevada Falls," seven hundred feet high, the most beautiful waterfall I ever beheld. It unites the power and

majesty of Niagara with much more outline of beauty. I am quite sure that it cannot be equaled on the face of the globe for marvelous beauty. In the opposite canyon is another fall, six hundred feet, which anywhere else would be celebrated for its magnificence and beauty. There are several more lofty "summits" not mentioned, such as "Cap of Liberty," "Mount Starr King," and "North and South Domes."

The "North Dome" is three thousand seven hundred feet high. Near it stands Washington's Column, strong and lofty. The South Dome is the most remarkable—was once, no doubt, the shape of an egg, the big end up—and by some convulsion of Nature, this solid rock was split in two—one-half left standing nearly perpendicular, four thousand five hundred and eighty feet, nearly a mile high. The other half was, no doubt, dashed down to the bottom of the canyon, now buried out of sight, but damming the river and making the beautiful little lake we now find—the transparent waters of which are Nature's mirror, reflecting with an accuracy and beauty these remarkable mountains which can hardly be excelled. It is properly named "Mirror Lake," and is much admired.

Early in the morning a thin haze coveres the valley, and slowly moves up the mountain sides, as the

streams of the brilliant sunlight from an unclouded sky come pouring through the openings in the mountain tops, illuminating long belts of mists which extend across the valley, and are lost among the rocks and foliage. Numberless little white clouds are separated from the misty curtain—are creeping up the mountain side among the projecting spurs—each following the other in their upward flight, and each eaten up by the sun with astonishing rapidity, as they pass above the shadow cast across the lower half of the valley. But as the sun slowly rises, the valley is filled with a peculiarly cool, gray haze—much like our Indian Summer haze "doubly refined."

There are interspersed among meadows of rich green grass in various portions of the valley, groves of trees of immense size and wonderful picturesqueness, not showing in any place the mark of an axe, or anything to alter this valley from what it was when the eye of man first looked into it.

Wherever we are, we can't but feel and realize that we are in a strange region, wholly unlike any other place, in grandeur, sublimity and beauty—the sublimest page in all the great book of Nature—the most remarkable specimens of the stupendous masonry of Nature on the globe.

By an act of Congress, this valley has been taken from the public domain for a National Park, and ced-

ed to the State of California, on condition that it be kept as such. As it now is, Nature is everywhere, and Art nowhere. Here I saw the Pono Indians, the simple children as of old, with their bows, and arrows with flint heads; their food mostly acorns pounded in a rock hollowed out perhaps centuries ago for the same purpose; their furniture willow baskets; cooking by heating stones, and throwing them when heated into the water; their faces tattooed and painted, and their enjoyments nothing above those of the animal. I hope the time will never come when Art will be sent here to improve Nature.

This marvelous place invites every one who possibly can to admire its surrounding cascades and mountain peaks; its beautiful sheets of water, falling thousands of feet unbroken; its projecting rocks, columns of yellow granite into the valley rising perpendicularly thousands of feet. Imagination fondly stops to trace the unwritten, undescribed, wild grandeur of that remarkably interesting valley.

Future generations shall tune their song to the music of thy waterfalls, and catch anew the inspiration of early time in the refreshing shades of thy romantic groves amid the wonderful Nature.

Every one while visiting California, who possibly can, should see this place. No one will regret the expense and fatigue in order to do it. Having once

seen this hiding retreat in the great mountains—one of the very few wonders of the world, and by no means the least—it will be a "joy forever." I would recommend that you take time enough. The interest increases with each successive contemplation, and you will most certainly desire to go again.

CHAPTER XLI.

A VISIT TO THE GEYSERS.

The journey to and from the big trees and Yosemite is the hardest one the traveler in California is called upon to make, but will give you pleasure, satisfaction and peace of mind the rest of your life. We return to San Francisco, and after resting a few days make a hasty excursion to the Geysers. We take the steamboat, pass over the bay, take the cars, through the productive and beautiful Napa Valley, and stop at Calistoga, a beautiful town, with environed cottages, surrounded by various springs, some boiling hot, others of various degrees of heat, and a number of sulphur springs.

We took an early ride next morning of twenty miles to the base of a great mountain, "Foss Station," so named after its owner—no small institution himself. He is an uneducated New Englander, endowed with qualities which makes him a marked man. But he harnesses his six horse team to an open wagon, and we are off, winding our way up the mountain five thousand feet high, till we come to a ridge nearly two miles long and perfectly straight, just possibly wide enough to let the wagon run on

its edge, though to see it ahead looks as if we were riding on an earth-collared rail, appropriately called the "Camel's Back." Down this ridge the horses dash at break-neck speed. Should the wheels vary a foot either side, we would go down several hundred feet among the rocks.

But stage-driving in this country is truly a science, and over it we pass, and are to descend nearly two thousand feet in two miles, to the canyon below. The horses dash down upon the quickest gait, and after making thirty-five short turns, a failure at any one of which would have cost us our lives, we are just eleven minutes in coming down to the bottom. Such rapid driving down such a road causes one to hold his breath and throb with excitement, thinking that whoever takes it hereafter must be a fool or crazy.

We are now in a deep canyon, on either side of which the majestic mountains rise three thousand feet and over. No mountains can exceed their symmetrical beauty. A large trout stream runs through the canyon, clear, cold and beautiful. We cross this brook at right angles and enter another canyon, which is the home of the Geysers. The Geysers were originally discovered in Iceland, and the word is Icelandic, meaning driving, urgent; because a Geyser is ever throwing up water or mud and wa-

ter. We at once realize that we are in a strange region; the earth burns our feet, and the air nearly suffocates us. The surrounding atmosphere is filled with the fumes of sulphur, nitric acid, and all other unpleasant smells you can imagine. At our very feet a stream of alum boils out, but a few feet from that perhaps is another of nitric acid, or some kind of salts, or soda, or pure sulphur, or sulphuric acid or ammonia.

A little distance off is a deep caldron, up which is boiling a fluid dark as ink. It is appropriately called the "Devil's Inkstand." I made my notes at the time with that ink, and have used it since, just as it was taken from the manufactory. It is good enough to be patented, as compared with many other kinds. Near this is the "Witches' Caldron," quite large, demon-like, black, boiling, raging and spouting. It is said to be fathomless.

Next we come to the "Steamboat," where steam spouts and roars high in the air, like letting off the steam when a large steamboat stops. A little distance from this is the "Devil's Tea-kettle," where the steam intervals, and where, as if groaning in confinement, you almost expect to see the demoniac spirits of the Evil One come forth next. One seems to be standing on the threshold of the infernal regions. Thrust a stick in the ground anywhere and steam will rush out.

We can compare the place to nothing more appropriate than the very worst description of hell. It is known as the "Pluton Canyon." The steam, the heat and the offensive smell of the chemicals soon makes your head grow dizzy, and feel a shortness of breath, and you must hasten away or it would kill you.

From what I had learned before my visit to the Geysers, I had supposed they were of volcanic origin, and that the wonderful heat was caused by fire, perhaps, far down in the earth, and that they were vents, or safety valves, for the internal fires. On examination, I was soon convinced that my opinions were not well founded, but were all wrong; that they are not at all volcanic, but Nature's great chemical laboratory.

We found here quantities of iron, causing the inky water, alum, ammonia, nitric acid, sulphuric acid, sulphur, epsom salts, and acid water of various kinds. One, when sweetened, makes good lemonade. Another spring is said to be remarkable in its good effects as an eye water.

Some of these springs have an unusuul degree of heat—from a hundred and fifty to two hundred degrees by the thermometer. Fill these vast mountain depths with these several chemicals, and let down the water upon them, and the phenomena which is found here will be produced.

The whole region is a subterranean treasury of chemistry. There is no place in the world where borax is found so pure, and in such quantity, as in the bottom of Clear Lake, not far from here. A few men can get several tons a day of beautiful crystalized borax.

Some future day, no doubt, science will come to this now mysterious region, and uncover these hidden treasures in unusual quantities for materials to be used for the good of man, and that which now seems to be the breathing holes of the regions infernal, are the means by which God shows his children where to find these chemicals.

There is no doubt, sulphur enough in this locality to supply this nation with gunpowder, and ink enough in the Devil's Inkstand to supply the world. I could not look upon the Geysers otherwise than a vast chemical repository, where these minerals have been thrown together by changes which have taken place in the earth, and that water has broken in, and continues to run in among them under their covering.

CHAPTER XLII.

BIRD'S-EYE VIEW OF CALIFORNIA.

We are now in about the center of the State, north and south, returning from the remarkable place described in the previous chapter, and stand on the Nevadas surveying this strange country. To the east lie the extended alkali deserts, no doubt once the bottom of an inland sea, thrown up with this mountain range at some distant period by volcanic pressure.

As we look north and south we see the ridges and the broken peaks along which many volcanoes once blazed. Here we have most plainly an immense country of volcanic origin, now sustaining remarkable forests, without which the great railroad could not have been built.

But we are going west. We see a belt twenty miles wide from where we are of magnificent forests. In this belt are the sugar pines, some nearly three hundred feet high, and the "Big Trees." No finer timber than that which grows on this strip can be found. Next to this is a belt some forty miles wide, beginning in British Columbia, which is known as the Golden Belt, and is also celebrated as the most

wonderful fruit-bearing region. Here the peach, the pear, the apple, the cherry, the nectarine, the almond, the pomegranate and the fir yield most abundantly. Here also the grapes grow and bear abundantly—almost beyond belief. We believe a more remarkable belt of the same extent cannot be found anywhere on the face of nature.

As we go through these belts we see the mountains, hills and valley, spotted with cattle and sheep paths, near enough together to let these natural engineers appropriate the wild oats. Here in the hills grow that wild fruit, the manzanita (or little apple) which the Indians gather to give a relish to their dry acorns. Here, beneath the lofty mountain ranges, in their productive and beautiful foot-hills and in their bewitching valleys, sleeps the gold yet to be found. There we look off over the great Sacramento Valley and the Coast Range of mountains, where the great ocean is kissing their base. On the western slope of these mountains, amid the fogs, is found that remarkable tree, the "redwood," from which boards are often made six feet wide. It is a species of cedar, and is used more for building purposes than all other kinds of wood in the country.

Still beyond, in the ocean are several islands, some the home of birds, from which large quantities of eggs are taken to the city. Others, inhabited by

that uncouth monster the sea-lion—weighing, when full grown, from two to five thousand pounds. We saw on the rocks, not far from the shore, many of these awkward creatures basking in the sun—some appear pugnacious and very noisy.

Some of the islands furnish superior advantages for keeping large flocks of sheep, growing the very best of wool. I was told that one man had a flock of two hundred thousand.

The coast range of mountains holds the great Pacific in its place, or rather several ranges of these mountains, parallel with each other. This range is from two to ten thousand feet high, and from thirty to forty miles wide. Between this and the Nevada mountain ranges lies the great Sacramento Valley, about five hundred miles long by fifty wide.

This now valley no doubt was once a great inland ocean, which in process of time broke through the coast range in the centre of the State, by wearing a channel into the ocean over a mile wide. This opening is known as the "Golden Gate." Why this narrow gorge, from the bay to the ocean, should receive this name long before the discovery of gold, was a study, for it had nothing to do with the discovery of gold. I could get no other theory than this: As the coast is approached from the ocean, the entrance has the appearance of opening, like a gate; and as we

look in through the heavy fog which fills the opening, we see the yellow sunlight resting upon the fog, brilliant and golden—concentrated in the narrowest part of the channel, where the fort stands—looking in the fore part of the day like a great pillar of fire hanging over the gate, and hence the name. Subsequent discoveries and developments in the country, have shown it truly to be a Golden Gate—the entrance to untold treasure.

Near the equator in the Pacific, as in the Atlantic, starts a river in the ocean. It flows up the coast of China, till it gets to Behring's Straits; into these it rushes and melts the icebergs, so that there are none in the Pacific. In doing this, it becomes very cold, and turns down in the direction of our coast. It goes to the Alentian Islands, where a part is deflected and makes towards the Sandwich Islands, making temperate what otherwise would be uninhabitable. A part of this now immensely chilled river flows down along the coast of Oregon and California. As these colder waters come near the coast, they are forced up to the surface and chill the vapors in the air, condenses them, and in the night cause a heavy fog, which hangs along the coast of California. Why does not this sea-fog cover the land? Because it never rises over one thousand feet; and as the coast mountains are much higher

than this, they keep it back. But at the Golden Gate, where there is an opening, having a chance, it does roll in every day and envelops San Francisco from about the middle of the afternoon till towards nine o'clock in the morning.

The inquiry has often been made, Why this unusual fog in and about the city, and no where else inside the coast range? But there is another reason why the fog does not go in and possess the land. The great valley spoken of is the laboratory of the State. There the sun comes down in its strength, and the heated, thirsty air rises, and drinks up all the moisture the ocean can send inland, long before it can become a rain-cloud. But there are unseen mists coming in from the ocean during the summer, as the wind always blows from the west at that season of the year. This more heated atmosphere mingles with the colder, which drives down over the snowy Nevadas, making the nights always cool, and refreshing to man or beast.

The stranger, on visiting California, is somewhat bewildered. He finds everything different from what he expected, or ever saw before. He seemed to have, either designedly or accidentally, alighted on another different country, where Nature has conspired to confound and enjoy his confusion.

How different from the Atlantic States. Here the

winds change oftener than we have days. There they blow in one direction six months of the year, and then the opposite for the other six months. Here, while the earth is frozen down and covered by deep snows, there they have no winter, and are plowing and sowing the seed, to grow unto the early harvest the finest of wheat. Here we have storms and showers; there they have no rain in summer—only in winter. Here our trees lose their foliage; there they wear their green covering the whole year. Here we have the thick greensward; there they have no turf. Here the farmer, with much labor and care, harvests his hay and grain; there he cuts hay only for the market, and threshes his hundreds, and perhaps thousands, of acres of wheat in the field, throw down the bags behind the machine to lie until wanted for market, confident that neither storms or dews will injure them. Here we have several kinds of wood, out of which implements and tools can be made; there they have no tree suitable for making a wagon, a plow or an axe-helve. Here everything is small when compared to the wonderful vegetable growth there—so much so, that one is tempted to doubt his own eyes. Between the spurs of the Coast Range are many beautiful and productive valleys, from ten to a hundred miles long. As we stand on the mountains, and look down into the Napa, the

Sonoma, the Russian and the Santa Clara Valleys, they have the appearance of lakes changed into land.

These valleys are so favorable to the sun that everything grows and matures very early. The farmers here harvest their crops about the middle of May. The refreshing winds which climb over the Coast Range sweep over these valleys, and also fan the foot-hills of the Nevadas. Generally, from about the first of May to November, there is no rain or dew in California.

The grains have all ripened; the grass has dried up where it grew, full of seed, making rich pasture, for there is no part of the year when animals fatten so much as upon what we would call the worthless grass in the field, but full of nourishment then. The ground becomes parched, and rests till the fall rains. We must wait till winter, when we are deep in the snows, to see this Pacific land fresh, luxuriant and beautiful. February is their month of beauty, as June is with us. Upon the uplands, during the dry summer, without water vegetation dies. With water, we see a fertility, a beauty unequaled, and hardly to be imagined. Consequently, the windmill every where, is an indispensable part of every house, furnishing water for the family, the gardens and for the animals usually. The value of the ranch is increased very much by having a stream of water upon it.

It was interesting to notice how things will adapt themselves to circumstances. The trees and vegetables here have a long tap-root, which penetrates the soil far down after moisture—enabling it to grow without rain a longer time. Providence seems to so constitute everything in this world as to draw its sustenance and natural life from the earth, directly or indirectly. It is evident that all the human family, all the animal creation, all the fishes and all the insect world, are "served by the field."

Nature furnishes materials, and it is for man to appropriate and improve them, to turn nature's wastes into gardens of utility and beauty. The population a country can feed and clothe, depends on her capabilities of soil and climate, and not on what her mines will yield.

We have no other State which has so great a variety of soil and climate as California, and no State which will produce such a large variety of products. All that is grown in the temperate zone or in the semi-tropical climate will grow here, of superior size and quality. The soil and climate is so generous, that the same amount of labor will give larger returns than anywhere else. Apples and pears are often gathered the second year from planting the seed.

The rapidity of growth here will astonish an East-

ern traveler. Here we see beets that will weigh over a hundred pounds each; onions at least ten inches across the top; cabbages weighing eighty pounds, and the smaller vegetables in proportion. Fruit is raised so easily that it has a low market. The cars that come up from the Santa Clara Valley bring to San Francisco several tons of strawberries daily, and this most delicious fruit is in the market every month in the year.

The potato will give two annual crops, and *such potatoes!* One would suppose they were at least two years in growing.

The long, dry summer allows the farmer to harvest his wheat and barley when he chooses, which are ripe the last of May or the first of June; but do not injure by shelling or otherwise by standing after ripening, as with us.

There are many overgrown estates in California which are injurious to the prosperity of any country. I visited one in San Joaquin Valley, near Stockton, of some twenty thousand acres, sixteen thousand of which was in wheat that year. To prepare the ground the owner had nine hundred horses plowing at the same time. Should he get an average crop the sacks to put it in would cost him at least thirty thousand dollars. Some stock-raisers have estates large enough to keep a hundred thousand head of cattle upon them and large flocks of sheep.

These large estates will, no doubt, soon be divided up for the good of the many. The Japanese have purchased large sections of land here, for the purpose of cultivating the mulberry and making silk. They are, no doubt, the most skillful silk growers in the world. The climate and soil is supposed to be admirably adapted to the business. They also design to undertake the cultivation of the tea plant. Every kind of grape known on the earth's surface will grow here in perfection.

Along the Golden Belt, in the foot-hills of the Nevadas, the whole length of the State is a volcanic belt from thirty to forty miles wide, which is exactly adapted to the wants of the vine. The west coast range has also become celebrated for the fruitfulness of the vine. In Sonoma Valley are some of the largest vineyards. The State now produces over seven millions gallons of wine annually, and the increase of vine is at least two millions a year.

California is, no doubt, the greatest wine growing region in the world. Her wines have already become celebrated, and have a reputation over the world for their superior quality.

When the thousands were rushing to California by land and water after shining gold, nobody expected to stay only long enough to obtain the desired treasure. Nobody supposed the soil could be made to

produce anything. Consequently this more important branch of industry was for a long time neglected. But time passed on; necessity and the usual quick observation and the adaptation of our people to circumstances, soon learned them that they were not only in a golden land, but also in the midst of a region unequaled in the world for agricultural productiveness.

California is about eight hundred miles long by two hundred wide. It has two parallel mountain ranges its whole length. Much of it is so steep and broken that cultivation is impossible. Yet it is supposed the State can support a population of twenty millions by her own resources.

A wise Providence seems to have reserved the Pacific slope of this continent till the Eastern portion had become settled, and His institutions established and proven before it should become a great part of our inheritance, and give to the people of the crowded hives of the Orient more comfortable homes.

San Francisco is, by her geographical position, by her capital and enterprise, the Elect City of the Pacific Coast, as New York is on the Atlantic; and nothing but earthquakes can prevent her prosperous growth—at least, nothing above ground. The entrance from the Pacific, through the Golden Gate

to the Bay, is directly east; then you turn to the south around the Peninsula, at the end of which the city is located, on the before-mentioned desolate sand-hills, having one of the most capacious and safest harbors, large enough to receive the ships of all the oceans of the world. Within a few years the forbidding hills have been graded down, and the low places filled up, till now we see a great city having one hundred and fifty thousand inhabitants, with architecture superior to many eastern cities—nothing looks young or unfinished.

You are surprised at seeing a city looking so old and finished. Capital centered here and found profitable investment. The city has several miles of very expensive wharfage now built, and steamship lines for China, Japan, Sandwich Islands and Oregon. She is now a great commercial and manufacturing city. San Francisco is not as agreeable in the summer as the cities farther inland, but makes compensation by having the most enjoyable winter.

During the summer the much heated, rarified air back from the coast rises, causing the setting in of a strong breeze from the ocean, which pushes through the Golden Gate, hurries and scurries through San Francisco filled with dust, more especially during the middle of the day when the heat is the strongest. This steady, pervading wind inland from the

ocean, cools the otherwise unendurable heat in the valleys, and gives to California her agreeable summer season. While the isothermal line on the Atlantic slope sweeps down from the ice-bound Arctic seas, freezing and covering the land with deep snows; whereas on the Pacific slope in winter the wind currents are from the equatorial regions north, warming the coast country, so that while we are frozen down they are ploughing and sowing, to grow the best wheat in the world.

The warm breezes from the south give to California her mellow and most agreeable winter season. Probably owing to the climate, children here have the fairest, fullest and greatest physical development. No where else can they be found developing such a physical manhood. It can hardly be otherwise, where children can live out in the open air the most of the year, and have a thousand incentives to effort. There will grow up in this country a race of men, physically, such as has no where else been found. There is one kind of human element in California, of too much importance to this country to be passed unnoticed.

When the discovery of the gold mines went out over the eastern world, the packed, starving multitudes of ancient China saw some deliverance, and soon thousands of them were scattered over Califor-

nia, digging gold and doing various other kinds of work, doing nearly all the domestic work of the country—*and doing it well*—the very best substitute for female labor. Their labor was indispensable from the very first. Had it not been for them, California could not have been made the great State she is to-day—they and the country were benefited by their coming. When the railroad was to be built they stood ready to do the work by thousands.

The better they are known, the more their labor is demanded. They seem to be contented and happy here. Yet, not one of them has signified his intention to become a citizen, notwithstanding the State imposes a tax on him for mining, of four dollars a month, which he could save if he were a citizen. The longer I remained among them, the more favorably was I impressed with their usefulness.

There is such an amount of human life in China, that many of them live half starved from generation to generation, and become diminutive—not larger than the average of our females. Yet John, (they are called by that name here,) is quite strong, enduring, active, quick to learn, quick to imitate, mild in disposition, kindly disposed, industrious, willing, economical—can live on very little, and will use that little to the very best advantage for himself or for his employer. A certain class, mostly foreigners

themselves, declared that the Chinaman should not come here; but they might as well go down to the Golden Gate and order the tide to stay out, with the Pacific Ocean behind it. Nothing can keep back the starving population in China, from going where there is plenty of labor. Labor will go where it is needed and paid the best—this is in accordance with immutable laws. They are now doing nearly all the work in the California factories, at one dollar per day, and they have proven to be superior workmen. Their labor is needed—let them come.

But some say they will come here in such numbers as ultimately to control the country. I have no fears of this. The Anglo Saxon race having founded and made this country what it is, with their original traits of character to control, to govern, will never transfer the control of this country to another race.

No other people in the world would or could have gone on the Pacific Coast, and established themselves, made governments and planted their home institutions so peacefully, so permanently, so prosperously. Our people truly, in their quiet way, are the most successful colonizers of the earth. No nation is so sure to impress itself on mankind, upon whatever it undertakes, as ours; and I have no misgivings as to the power which will control this country in the future as in the past. There are other

places, we have not space to notice, in California, which the traveler should not fail to visit.

He should by all means take the steamer at San Francisco, down the coast, and get an idea of Lower California, the land of the angels, a region of country larger than any one of the New England States, as yet but little developed; where are the fertility, the beauty, (as God made it,) the fields of the tropics, where enterprise will find many sources of wealth; where wealth may sleep in the lap of beauty; a country which can be made a garden fair as Eden. Here are the refreshing rains at all seasons of the year; the land of sunshine and showers, giving a constant, luxuriant, vegetable growth the whole year. Here the strawberry plant yields its fruit every month of the year. Here nature seems to have concentrated more of that which goes to make up the sum total of the comforts of human life, than anywhere else in our sunset land. Life here is one continuous summer, without excessive heat; the cool sea breeze comes in to cool the heat, while the warm breezes from the south drives winter far away.

Those who go to the Pacific Coast to find new homes, will find this region healthful and of the greatest fertility. We know of no place where nature has been more liberal; where more can be obtained with so little effort. Everything seems generous—liberal to a remarkable degree.

Previous to the Mexican war, we knew California only by name—a far-off, unknown land; but little this side of where the sun goes down in the great ocean—which tribes of degraded Indians occupied; while her great mountain ranges, with their majestic forests stood sentinel, while the extensive and beautiful valleys were listening to hear the tread of coming footsteps, from the East and the West, for another people were on the way, whose indomitable energy would soon move out imbecility, and the country begin the fulfillment of her destiny—but not till fearful battles had been fought was the question settled as to who should own the land of gold.

The American flag, as usual, triumphed, which gave confidence and safety to all nations. Soon after followed the discovery of untold wealth. Excitement ran unbridled. Such a rush for golden land is unparalleled. The new born had no infant life or youth, but stood up full grown before Congress for admission as a State. California came—the fairest daughter of the Pacific—with her garments trimmed with gold; none could refuse her—not one. As the result, we soon have a full-grown State, not fully developed, but meritorious, and the Republic extended between the two oceans.

The wonderful productiveness of the mines gave confidence and held the Government steady, as her

paper credit extended during our late war, unparalleled in the annals of the human race. The great fact was before the people, that untold treasure of gold and silver was laid away until called for in our Pacific land, on the surface and beneath the ground, which gave hope when all seemed lost, by the convulsions of cruel war. But as time passes; government credit grows stronger; the Old Ship moves on steadily to her moorings again, because she is balasted with gold. The discovery of gold in California gave a stimulous to every department of business, advanced civilization at home and abroad, and stirred up old nations to seek more comfortable homes, by having more profitable employment.

An overruling Providence has a time for all things. The discovery of the valuable metals on the Pacific Coast seems so timely—just when mankind could be made richer without becoming vain—just when the world needed more coin the most; when people could have everything better; when they could have silver dishes, and not be as proud as our ancestors were with their shining pewter.

After the before unknown treasures of the Pacific part of the Continent were made known, the world seemed to rise up for a new race in human progress; the foundation of human comforts and enjoyments were largely extended, and the world moved ahead

within the last twenty years in Christian civilization farther than in any previous century.

Nature has done much to make this sunset land of ours a home for the different families of men, and give her a place among the other States of the Union of so much importance. We see a great future for this part of our land—far-reaching in results to the human family, for both hemispheres. Here the people from the East and from the West meet—here they unite their interests. It would seem to be the plan of Infinite Wisdom, to bring the more feeble races of men here through the Ocean Gateway, where they might learn His purposes, and have the benefit of a higher civilization. There is no nationality on earth so certain to impress itself upon weaker races, as the American. Christianity and civilization, those twin sisters of a birth divine, which started where Eden bloomed, have been marching together all through the ages, and all round the globe into this fair land, the utmost part of the West.

Here, on this western margin of the globe, our people have found a heritage which rivals the land of promise, as described by the Prophet: "A land of brooks, of water, of fountains and depths, that spring out of the valleys and hills; a land of wheat and barley, and vines and fig trees, and pomegranates; a land of oil, olive and honey; a land in which thou

shall eat bread without scarceness; thou shalt not lack anything in it; a land whose stones are iron, and out of whose hills thou mayest dig brass," a delineation of California, the offspring of Divine appointment.

Asia first saw the Star of Empire take its way westward, when it illumed the pride of Babylon and Ninevah, and the Kingdom of Darius. Europe next grew radiant in its beams, when it gleamed on the darkness of Greece and Rome, and lit up the modern powers in its rich effulgence. Then it traveled across the ocean, to pour its greatest and latest splendor down upon America with a pervading glory, ever spreading on across the Continent, until its mission was accomplished, and it fell on California—the Empire of the West.

The remembrance of many scenes and experiences in our travels over this other half of our heritage, will ever form one of the pleasant memories of life. No country more grand, varied and magnificent—a union of that which is great and imposing—when seen as God made it.

We terminate our travel with enlarged views of the Pacific part of our country. I would that you, kind reader, and all our people, could worship before its remarkable Nature—without it none can have an adequate knowledge of this country—of our extend-

ed domain; of our developed and undeveloped resources; of the future home of millions, bound together by a common interest of Divine love and human brotherhood, from Ocean to Ocean; but one great Nation, one Government, one Glorious Flag, one Noble Destiny.

THE END.